





ENVIRONMENTAL ASSESSMENT BOARD

VOLUME:

264

DATE:

Thursday, November 22, 1990

BEFORE:

A. KOVEN

Chairman

E. MARTEL

Member



FOR HEARING UPDATES CALL (TOLL-FREE): 1-800-387-8810



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HEARING ON THE PROPOSAL BY THE MINISTRY OF NATURAL RESOURCES FOR A CLASS ENVIRONMENTAL ASSESSMENT FOR TIMBER MANAGEMENT ON CROWN LANDS IN ONTARIO

IN THE MATTER of the Environmental Assessment Act, R.S.O. 1980, c.140;

- and -

IN THE MATTER of the Class Environmental Assessment for Timber Management on Crown Lands in Ontario;

- and -

IN THE MATTER of an Order-in-Council (O.C. 2449/87) authorizing the Environmental Assessment Board to administer a funding program, in connection with the environmental assessment hearing with respect to the Timber Management Class Environmental Assessment, and to distribute funds to qualified participants.

Hearing held at the offices of the Ontario Highway Transport Board, Britannica Building, 151 Bloor Street West, 10th Floor, Toronto, Ontario, on Thursday, November 22nd, 1990, commencing at 9:00 a.m.

VOLUME 264

BEFORE:

MRS. ANNE KOVEN MR. ELIE MARTEL

Chairman Member Digitized by the Internet Archive in 2023 with funding from University of Toronto

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1	Upon commencing at 9:20 a.m.
2	MADAM CHAIR: Good morning. Please be
3	seated.
4	Before we start, Mr. Friedin, there was
5	an announcement about some changes for the last week of
6	November and the first week of December.
7	We will be adjourning at noon on
8	Thursday, November 29th, and the Board will not be
9	sitting on December 3rd, but we will be starting at
10	9:00 a.m. on Tuesday, December 4th.
11	MR. FREIDIN: Thank you.
12	MADAM CHAIR: Mr. Freidin?
13	GEORGE MAREK, Resumed
14	CONTINUED CROSS-EXAMINATION BY MR. FREIDIN:
15	Q. Hopefully a very quick question on
16	another Foster and Morrison article, Mr. Marek, it's in
17	your source book. It's contained at page 85 of the
18	proceedings of the workshop in relation to site
19	preparation compiled by Corbett. So I think it's
20	probably in your source book 1 under Corbett.
21	THE WITNESS: I've got source book 2.
22	Discussion off the record
23	MR. FREIDIN: It's talking about Corbett.
24	MR. MARTEL: What page is it, please?
25	MR. FREIDIN: Page 30.

Marek cr ex (Freidin)

1	MS. SWENARCHUK: Of Corbett?
2	MR. FRIEDIN: Corbett. The document is
3	the proceedings of the workshop in relation to site
4	preparation, and there are papers by different authors.
5	Foster also made a contribution.
6	THE WITNESS: Page 30?
7	MADAM CHAIR: Yes. I'm actually going to
8	just slow down the pace a little bit.
9	MR. FREIDIN: Q. Page 28 is where we
10	find the title of the article
11	A. Yes.
12	Qdealing with the effects of site
13	preparation and full-tree logging on nutrient cycling.
14	A. Site preparation and full-tree
15	logging, yes, that's right.
16	Q. And it's just the passage on page 30
17	that I want to draw to your attention. It says at the
18	top of the page, and it's dealing with nutrients.
19	A. Yes, I have that.
20	Q. "In the natural state, release
21	of the nutrients contained in the forest
22	floor organic layers is often dependent
23	on cycling through fire disturbance. A
24	severe fire, in addition to favouring
25	rapid mineralization of many nutrients,

1	can contribute to a reduction in the
2	nitrogen capital of the site. In a
3	managed forest, the organic layer of
4	nutrients in soil will be disturbed less
5	through site preparation such as
6	prescribed burning and sheer blading to
7	avoid potential losses in future forest
8	productivity."
9	Q. When I raised that, I just
10	interpreted that as being one situation where proper
11	manipulation through site preparation, in fact, will
12	result in fewer nutrients
13	A. Or losses.
L 4	Qbeing lost from the site than would
L5	occur through
16	A. Fire.
L7	Qfire. And you agree with that
18	proposition?
19	A. Yes, I agree. One problem I see,
20	this is a very simplistic and short examination of
21	Corbett, but very much but yes, in principle, I
22	agree with his proposition here, right.
23	Q. So we can achieve regeneration of the
24	site and bring in this kind of more productive state?
25	A. That's correct.

Marek cr ex (Freidin)

	· · · · · · · · · · · · · · · · · · ·
1	Q. And if we do that properly we can end
2	up, in fact, losing fewer nutrients from the site
3	through disturbance of the forest floor than through a
4	fire?
5	A. Depends on the fire.
6	Q. And again we are talking about
7	A. He's talking about prescribed
8	burning.
9	Q. And he's talking about we can lose
10	fewer nutrients than what we would due to, what he
11	says, is a severe fire?
12	A. That's correct.
13	Q. Thank you. At page 45 of your
14	witness statement.
15	A. Forests for Tomorrow?
16	Q. Yes, sir.
17	A. Okay. 45.
18	Q. Which is the section in relation to
19	artificial regeneration and planting in particular.
20	MS. SWENARCHUK: Artificial?
21	MR. FREIDIN: Artificial regeneration and
22	planting in particular.
23	THE WITNESS: Page 45.
24	MR. FREIDIN: Q. Yes. At page 45 you
25	indicate at the bottom.

1	A. Yes.
2	Q. Second last line.
3	A. Yes. (handed)
4	MADAM CHAIR: Thank you, Mr. Marek.
5	MR. FREIDIN: Q. That no white spruce
6	MADAM CHAIR: Excuse me. Just one
7	moment, Mr. Freidin.
8	Discussion off the record
9	MR. FRIEDIN: Q. On the bottom of page
10	45 in the second last line, Mr. Marek
11	A. Yes.
12	Qyou make the statement:
13	"No white spruce planting is produced."
14	A. That's right.
15	Q. I would like to well, on what
16	basis do you make that statement?
17	A. This is a statement which should
18	be it's a general statement where I have tried to
19	point out that comparing to the in the past there
20	was quite a bit of white spruce planted, and now I
21	don't see any white spruce plantation being established
22	in the boreal forest, or very rarely.
23	Now, I don't know if white spruce is
24	still produced in small numbers here and there, but I
25	don't see any plantation of white spruce being

1 initiated. Q. You'll have to help me, Mr. Marek. 2 Yesterday you've indicated that Forests for Tomorrow's 3 terms and conditions, which you support, indicate that 4 you should use the white spruce seed tree method--5 6 Α. Seed tree method. --in all cases in mixed wood stands; 7 Q. right? 8 9 A. In all purpose forestry, yes. 10 Yes. In mixed wood stands? 0. 11 A. In all purpose forestry. 12 All right. In multi-purpose forests. 0. In multi-purpose forests. 13 Α. 14 So the concern about a lack of the Q. production of white spruce seedlings would be their --15 16 the lack of their availability for areas where you 17 believe that there should be this intensive 18 management --19 Α. Correct. 20 Okay. In Ontario, when we talk about 21 the harvesting of spruce, would you agree that the 22 large, large majority of the spruce that would be 23 harvested would be black spruce as opposed to white 24 spruce?

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You said would be?

Α.

25

1 Yes. Is, is. 0. 2 Oh, is. Right now, yes, black spruce volumes are way over the white spruce. 3 4 Q. All right. I'd like to direct your 5 attention to the statistics for the Ministry of Natural 6 Resources 1988/1989 which is Exhibit 42. 7 A. Yes, I have it someplace. 8 MS. SWENARCHUK: You didn't give us a 9 list of exhibits. 10 MR. FREIDIN: This was the list of 11 exhibits -- I arranged for someone to call everybody 12 and I assumed they called your office as well, I think. 13 Q. But in any event, let me just show 14 this to you --15 Α. That's fine, quote. 16 It's very, very brief. 0. 17 I think I locate it, I had it home. Α. 18 Q. I'm looking at page No. 6. 19 Yes. Α. 20 And it indicates, for 1989 the number Q. 21 of white spruce seedlings produced was 14,943,550. And I just want to know: Were you aware of that figure 22 when you prepared your witness statement and stated 23 that --24 25 A. No, I was not aware of that figure at

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_	chac cime.
2	Q. All right. Thank you. And in terms
3	of the volumes harvested, at page 47 of your witness
4	statement
5	A. Yes?
6	Qin relation to the subject matter
7	of white spruce, if you go down into the last full
8	paragraph, five lines, it states:
9	"The volumes harvested annually"
10	referring to white spruce.
11	A. Yes.
12	Q. "from natural stands in the boreal
13	forest are considerable and it is of
14	prime importance to the lumber industry
15	of Northern Ontario."
16	A. Exactly. Lumber industry in Ontario
17	cannot exist without white spruce, to some degree jack
18	pine, but I think white spruce is a very important part
19	of our lumber industry demand.
20	Q. Now, I just should show you this so
21	you know what I'm referring to. There's a table here
22	on page No. 21 of Exhibit 42 which talks about volume
23	and values of timber cut from Crown Lands for the year
24	ending March 31st, '88.
25	And we go down and they have the

1	softwoods in the left-hand column
2	A. Correct.
3	Q and they have under white spruce,
4	89
5	A. 89,633,602 cubic metres.
6	Q. All right. And leaving that aside,
7	and we'll talk about spruce mix in a minute.
8	A. Mix, yes.
9	Q. But let's leave that for the moment.
.0	A. Yes.
.1	Q. My calculation indicates that the
. 2	amount recorded here for white spruce is .5 per cent of
.3	the total softwood harvested in that particular year.
. 4	A. Could be, yeah. Yeah.
.5	Q. All right. And were you aware of
.6	that figure when you made your statement that there is
.7	a considerable amount of white spruce harvested in
.8	Ontario?
.9	A. Yes, I'm aware of the quantities.
20	Q. All right.
21	A. Not exactly, but I'm aware what kind
22	of contribution white spruce does in the production of
23	timber.
24	Q. Okay. And just to be fair to you,
95	there's another section here that says underneath white

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1	spruce, spruce mixed.
2	A. Yeah.
3	Q. That would include black spruce and
4	white spruce, it just would be spruce which had not
5	been reported by species individually?
6	A. Yes. I see the heading.
7	Q. And, therefore, a portion of the
8	eight million, one hundred and ninety well, this big
9	figure here for spruce mix, part of that would be white
10	spruce?
11	A. Yes.
12	Q. But based on your earlier evidence it
13	wouldn't be very much because the large, large majority
14	of the spruce which is harvested in Ontario is black
15	spruce as opposed to white spruce?
16	A. Yes.
17	Q. Thank you.
18	A. Madam Chair, may I just add just a
19	word or two about my statement in my testimony here.
20	I'm acute aware of lack of planting of
21	white spruce. I'm aware of matter of fact, I did
22	not in last year or two, I did not see any, through my
23	travels, I didn't see any white spruce being planted, I
24	have seen many jack pine and black spruce, but I didn't
25	see white spruce.

1	But the point here is that white spruce
2	is very important part in the soil production and high
3	quality of products in Ontario.
4	We have many sawmills now which are
5	lacking in northern Ontario of this volume of white
6	spruce, they are frantically searching for additional
7	volume and they are not in hand. So I thought maybe in
8	my report I will produce the statement.
9	Q. Just so the record is clear, I'm
10	advised by Mr. Waito that the figure is 89,633.62 cubic
11	metres.
12	A. Yes.
13	Q. Not 89-million. You said 89-million.
14	A. Oh, I see.
15	Q. It's 89,633; is that correct?
16	A. Where?
17	Q. Here.
18	A. Well, that's right, here's a comma
19	here. So, 89,000, that's correct.
20	Q. Okay, thank you. Now, Mr. Marek, we
21	had a discussion yesterday about the stocking, if you
22	recall, I had done a calculation as to the number of
23	plots per square mile that had been done in the Thimble
24	Creek area.
25	A. Okay.

1	Q. I have the calculation here that I
2	said I would give to you. I will give it to you during
3	the break and some time during the day you can look at
4	it. As you see, it is very brief and I just wanted you
5	to check that my math is correct.
6	In relation to a question that arose from
7	Madam Chair, as I understood it, was whether in fact
8	what the common practice is in Ontario in terms of the
9	number of plots that are done for when you do a
. 0	stocking assessment now.
.1	And, Mr. Marek, in terms of that matter,
. 2	it is my present information that when laying out plots
.3	for stocking surveys, the present practice will result
. 4	in a minimum of .8 plots per acre which, if we worked
.5	that out for plots per square mile, is approximately
. 6	220. Now, are you able to
.7	A. Confirm.
.8	Qconfirm the accuracy of my
.9	information?
20	A. That's the first time I hear about
21	it. I always thought it was done on two per cent, two
22	per cent of the area, that's what I understood from my
23	past experience and working within the two per cent,
24	usually.
25	MR. FREIDIN: And, Madam Chair, I'll have

1	to, and I do undertake to, in fact establish the basis
2	of my information in reply evidence.
3	MADAM CHAIR: Okay.
4	THE WITNESS: The question I would like
5	to ask, Madam, is this: Madam Chair, from my past
6	experience with MNR, we've always had a problem to
7	establish this quota because we ran out of money and
8	the assessment was always considered as a last
9	priority.
10	Now, it may have changed now, I do not
11	work for MNR, obviously, but I had a problem with
12	establish any kind of consensus or how much we are
13	going to assess, because the assessment, "assessment",
14	always be the last priority.
15	So, in many instances we just couldn't do
16	it because we didn't have the money to do that with.
17	MR. FREIDIN: Q. I think what I was
18	suggesting to you - and I think the Ministry had
19	indicated had similar concerns about the amount of
20	funding for doing some of these things - and I'm
21	suggesting to you when plots are laid out on the
22	ground, when they are laid out on the ground, we end up
23	with the number of plots that I suggested.
24	A. I don't know. I cannot confirm, I
25	cannot tell you.

1	Q. Okay. Now, can we just go back to
2	the Forests for Tomorrow terms and conditions.
3	A. Yes.
4	Q. And
5	A. Go ahead.
6	Q. No, I think it's important that you
7	have them.
8	A. It is important, go ahead. I have
9	found it here, I put it here yesterday. Will you help
10	me out?
11	MS. SWENARCHUK: Yes, I'll look here, you
12	look there. Here it is.
13	Discussion off the record
14	THE WITNESS: Yes, go ahead.
15	MR. FREIDIN: Q. Looking at the bottom
16	of the first page, term and condition 1.1(h)
17	A. Correct.
18	Qwhich requires prescriptions
19	shall it says:
20	"Prescriptions shall require the use of
21	extensive silviculture on all sites and
22	stands capable of natural regeneration of
23	primary coniferous species."
24	And then it goes on and indicates when
25	intensive silviculture may be used.

1	Could you tell me, Mr. Marek, does 1.1(a)
2	apply; in other words, does 1.1(a) qualify 1.1(h) such
3	that the stands must be capable of natural regeneration
4	of primary coniferous species to the species and
5	density of the stands that are harvested? Do you
6	understand my question?
7	A. Go ahead again, please.
8	Q. All right. Take a look at l.l(a).
9	A. I am looking.
0	Q. 1.1(a) says
1	A. Results
2	Qthat:
.3	"Prescriptions shall result in stands
4	equal to the species and density of the
.5	stands that are harvested."
.6	Do you see that?
.7	A. Yes.
.8	Q. Does that requirement apply when
.9	someone is trying to comply with subsection (h)? I'm
.0	assuming that it does, I just want you to confirm that
1	that's the case, that
2	A. Okay. Madam Chair, I think this has
13	been covered before. However, just to be clear, the
4	(a) the l.(a) here deals obviously with quality and
5	quantity of stands which will which we try to

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regenerate. That extensive silviculture apply on an 1 area; in other words, here is the quality and here we 2 talk about quantity. Extensive silviculture means on 3 the broader horizon. That has been discussed 4 5 vesterday. Now, counsel has tried to correlate these 6 7 two aspects, quality and quantity, and in that field I would say there is compatibility. 8 9 Q. All right. 10 Is that what you want? Yes, I think we are getting there. 11 Q. 12 Α. You're getting close. Okay. 13 So that when you are having a Q. prescription developed under 1.1(h), then it's got to 14 15 meet the quality and quantity requirements of 1.1(a)? 16 But again under the -- there are two 17 conditions involved and, that is, extensive management in stands like this over large area and quality of 18 19 stands which we try to establish. 20 In your evidence, Mr. Marek, I think 21 we agreed that the intent of 1.1(h) was to require the 22 use of natural regeneration as a first attempt at 23 regeneration of black spruce on all areas which would 24 fall into your multi-purpose forest? 25 That is correct. A.

_	Q. In your evidence, sir, you referred
2	to
3	A. Not exclusively, not again, we
4	have certain standards carved in stone or, and I have
5	cautioned you, sir, that in many instances we must
6	prevent this carving in. There is a flexibility, there
7	is a manager's option to all kinds of manipulation, and
8	I call it manipulation in order to achieve the
9	objective.
0	And I would like to point out again that
1	this so-called FFT draft terms and conditions,
2	silviculture prescription, is summing what, three,
3	four, five pages - where we going to deal in practice
4	we may have probably 50 pages. So I think that has
5	been said before, and I
6	No, if you are going to analyze every
.7	words and every connection between, we going to get in
.8	a bottle neck, I'm quite sure.
.9	Q. All right. You have indicated that
0	the intent is then to have options available even in
1	relation to 1.1.(h). My question for you is: Does
2	that include the option to plant as the initial
13	regeneration method?
4	A. When you talk about again, you are
:5	asking me yes or no, and I have to qualify because

there are certain gray area between which are most 1 2 important. Q. Yes. 3 And may I point out to you, sir, that 4 I have said many times that planting by itself is 5 applicable all over scope of conditions. We said 6 yesterday on many occasions that if natural 7 regeneration fail, you have to plant. 8 9 Q. If natural regeneration fails, you 10 have to plant, yes. 11 A. You have to plant. 12 0. Yes. 13 A. Because there is no option and we 14 have a duty to regenerate or renew the forest, so we 15 have to do it one way or the other. Okay. So if you talk about multi-purpose 16 17 forestry as I visualize it there will be cases, obviously, that the planting will be a very important 18 19 part of it. If we fail to regenerate naturally or 20 damage has been by other means -- interference... 21 So we have to plant trees, and I have 22 stated I think in this document that the natural 23 regeneration and artificial regeneration -- or if you 24 want to, artificial regeneration and natural 25 regeneration are the options the forester have, he

haven't got other option. 1 2 So in timber management planning process 3 and in timber management plan, these options were in detail carved in. This is just a guidance, sir. 4 5 Q. All right. In your answer you 6 indicated that if natural regeneration fails, planting 7 is an option. 8 A. In black spruce management. 9 Q. Right. I take it, therefore, that 10 when you say that options are available -- well, let me 11 forget that. You're saying that when you're in 12 multi-purpose forests--13 Α. Yes. 14 Q. --you do not have the flexibility 15 according to these terms and conditions to say: I'm 16 not going do try natural first, I'm going to plant 17 first? 18 A. First. 19 Is that correct? That's the intent? 20 No, no, that's not intent. A. 21 In what circumstances then, in Q. 22 multi-purpose forests, can you say: I am going to 23 plant this area--A. Instead of natural regeneration, is 24 25 that --

1	Q. Yes, instead of.
2	A. Yes.
3	Q. When can you do that?
4	A. Of course, that option does not exist
5	according my terms my terms of reference for
6	multi-purpose forestry.
7	Q. Right.
8	A. Because if you do management of black
9	spruce, we are clearly stating right from the beginning
10	that the natural regeneration is No. 1 objective,
11	natural regeneration of black spruce.
12	If that regeneration fails in
13	multi-purpose forest, then or other things happen,
14	there are many things which can happen, not only
15	failing; there are diseases involved, there is
16	improvement planting or improvement of stands, and I
17	don't know what else, it's a complex situation, then
18	you will plant trees.
19	Q. Now, you have indicated
20	MADAM CHAIR: Sorry, Mr. Freidin. Just
21	one question, Mr. Marek.
22	THE WITNESS: Yes.
23	MADAM CHAIR: Given that black spruce has
24	not been managed in this way to date, if your
25	prescription were implemented immediately

1	THE WITNESS: Yes.
2	MADAM CHAIR:wouldn't there be some
3	period of time where you would require planting,
4	certain types of site preparation and planting to bring
5	the stands into a state where you could start managing
6	them by natural regeneration?
7	THE WITNESS: Madam, I'm going to make it
8	very simple. We are going to have a large area in
9	boreal forest where regeneration of black spruce failed
0	already.
1	MADAM CHAIR: Exactly.
2	THE WITNESS: I'm talking about second
.3	growth forest, what are we going to do with the second
4	growth forest when the presence of black spruce is
.5	minimal or does not justify and cannot be implemented
6	in view of natural regeneration.
.7	What else can you do, sir, you have to
.8	plant.
.9	MADAM CHAIR: Plant. And that's the
0.	decision of the forester and based on what he has
1	seen
2	THE WITNESS: Exactly.
13	MADAM CHAIR:in the forest?
. 4	THE WITNESS: Exactly, Madam. We going
!5	to have plenty of it, I'm quite sure, if we going to

- establish high production area, we have to tackle the 1 problem of second growth forests, which does not 2 produce, as it should have been, if properly managed. 3 4 So we going to do lots of planting there, basically; therefore, I appeal again to you to 5 understand the problem. The problem is that we have 6 7 millions of hectares of neglected forests which have to 8 be put into production, we have hundreds of thousands of hectares of forests which is attacked under budworm; 9 in other words, there won't be any spruce or very 10 11 minimal - very minimal representation. 12 What are you going to do, plant. But the 13 simultaneous, that area may be declared as the all 14 purpose forestry thing. See, this is a problem we 15 have, how you going to allocate it --16 MADAM CHAIR: But even in areas that are 17 designated under your scheme for multi-purpose 18 forestry--19 THE WITNESS: Right. 20 MADAM CHAIR: -- you might want to start 21 with a viable forest, you might -- even for a use other 22 than timber you might want to say: Well, I want to 23 start with a forest and I can't get that with natural 24 regeneration, so I have to plant.

THE WITNESS: That's right.

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1	MADAM CHAIR: And that's the decision of
2	the forester and he might not want to wait 20 years to
3	see if natural regeneration doesn't take, he knows that
4	it won't.
5	THE WITNESS: Madam, unfortunately, this
6	is not only decision by forester, this is going to be
7	decision of the planning process.
8	MADAM CHAIR: All right.
9	THE WITNESS: Because in many instances
.0	we will be clashing where the forester going to intend
11	to plant and going to say: I'm not plant here, and
.2	probably going to say: Oh, you won't. You going to
L3	leave it as it is, or you going to do some other things
.4	with it?
15	See, this is a dilemma we have now
1.6	because we neglect many area of forest, and we don't
L7	know what to do.
L8	MR. MARTEL: You then have to go back, in
L9	your plan, all of the area, or in a lot of the area
20	which you don't consider has been successfully
21	regenerated, in addition to moving with the present
22	plans as they're implemented, so you're going to have
23	to attack it on two fronts.
24	THE WITNESS: You bet. You bet, sir.
25	And I should be talking to that subject when I'm

concluding my remarks, because this going to mean that 1 we have to take drastic steps in order to keep forest 2 3 going. 4 MR. FREIDIN: Q. Now Mr. Marek, you indicated that one of the situations where you would 5 have to plant is where you have one of these second 6 7 growth forests, and you've said you've come upon it and 8 it's not very good --9 A. Worthless. 10 Q. It's what? 11 Α. It's worthless. It's worthless. I think you called 12 Q. 13 it junk forests. You used the word junk forests, I 14 think. 15 A. I used junk; Baskerville call it 16 silviculture slumps. 17 Q. Okay. And so in those areas, that 18 would be an exception to this general rule if we're 19 trying to list exceptions, you've come across one of 20 those and you want to regenerate black spruce--21 A. Which was there before. 22 Q. Which was there before, which would 23 have been there had--24 A. If... 25 Q. --natural disturbance come through--

1	A. That's right.
2	Qand everything
3	a. That's right, exactly.
4	Q. You can plant.
5	A. That case. Well, what else can you
6	do there?
7	Q. All right, that's fine. Now, as I
8	understood your slides, some junk forests you say were
9	created as a result of the type of regeneration that
.0	was or was not done in the past.
.1	A. Right.
. 2	Q. I also understood from your slides,
.3	sir, that because of fire control, fire protection
4	there are stands out there - these are virgin stands if
.5	I can call it - fire originated stands
. 6	A. Correct.
.7	Qwhich aren't subjected to fire and,
.8	as a result, they start breaking up and you start
.9	getting balsam fir coming in.
20	A. Correct.
21	Q. Some of those stands have not been
22	accessed yet; is that a fair statement?
23	A. Correct.
24	Q. So that as areas are accessed for the
25	purposes of timber management, some stands will be in

1	this unsatisfactory state, not because of past
2	silviculture but just because nature has not been
3	allowed to take its course in terms of fire
4	disturbance?
5	A. Correct.
6	Q. I take it then, in those areas,
7	although you're going into a black spruce stand,
8	because it will be in this unsatisfactory state,
9	planting will also be permitted?
10	A. According to feasibilities to apply
11	natural regeneration versus planting, there are certain
1.2	criteria which has to be put to the forester or he's
1.3	aware of it put before public and say: What are we
14	going to do?
15	Here he said: No chance to get natural
16	regeneration, planting is the only option, let's plant
17	it because it's ugly.
18	Q. Okay. The forester who makes that
19	decision, I take it would be the forester who has
20	responsibility for managing the forest management unit
21	in question?
22	A. I just said two seconds ago, that if
23	all these plans scrutinized by public, if public are
24	going to decide a certain area is in a situation where

planting is the only consensus to get black spruce

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- back, surely it's common sense that the forester is

 going to look at it again and going to say: Okay, I

 agree or I disagree, let's discuss, let's discuss what

 we going to do.
- 5 Q. Yes.
- A. And if he, according to his own
- 7 perception--

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- Q. Yes.
- A. --will get spruce back, he goes to

 the public and say: Look, this is going to be, this is

 going to happen, and so declare it or discuss it.

 Then, of course, the prescription will be put in the

 timber management plan and implemented.
- 14 O. What --
 - A. You see what I'm trying to tell you, sir, is that input by public that we finally got this issue what you talking about, George Marek going to establish Limestone Lake, regardless what anybody says, going to plant trees, and everybody says he's a God -- I am going to put it before public, because that decision has to be made by public, what we want from our forests.
 - In other words, the goals and objective got to be decided by public, the scientific input of forester who going to implement it.

1	Q. Okay.
2	A. Is that clear?
3	MADAM CHAIR: Yes.
4	MR. FREIDIN: Q. And I guess the
5	question then becomes, if we're dealing with what is
6	required to regenerate the site and the professional
7	forester is strongly of the view that planting is
8	required
9	A. And plants
10	Q. No, no, no, and he asks for input to
11	the public, explains that to the public, and the public
12	say: We don't think it's necessary, all right, we want
13	a good forest back, and the forester says: It has to
14	be planted if you want it back, and they say: No, no,
15	we don't agree with you, just do it naturally.
16	A. And are wrong.
17	Q. Who has the responsibility in that
18	situation to make the ultimate decision as to what
19	silvicultural prescription will be applied?
20	A. You are picturing there the most
21	negative approach to forestry, sir.
22	Q. Well, I'm
23	A. Most negative, but I agree it exists
24	and exists for very specific reason, because we didn't
25	sell proper forestry to the public as yet.

T	Q. And I agree that there's a task
2	perhaps, there's a task to improve this communication.
3	A. You bet.
4	Q. The ultimate decision would be for
5	the public and the forester to agree on what should be
6	done to achieve their common objective of having a good
7	forest, but we've got to deal with the situation that's
8	at hand.
9	How are you going to deal with that in
.0	the situation where there was a lack of consensus?
1	MR. MARTEL: Could I ask a question,
.2	because isn't the problem up to this time that, in
.3	fact, people either weren't consulted or consulted so
.4	late and in such a minor way that, in fact, they are
.5	suspicious?
.6	There is a suspecting public out there
.7	that doesn't believe that they're doing anything else
.8	but maybe rubber stamping, that they've got to get in
.9	sooner as part of the overall process so that they're
20	educated and agree to things as you go along, as
21	opposed to coming in at the last moment and just rubber
22	stamping. Am I right
!3	THE WITNESS: Mr. Martel, you
24	MR. MARTEL:in my assessment?
25	THE WITNESS: Madam Chair, Mr. Martel

couldn't express this more accurately than actually is. 1 That's --2 MS. CRONK: I would point out, Madam 3 Chair, obviously the witness' opinion I don't object to 4 being solicited at all, but you do have conflicting 5 evidence on that. I simply point that out, you do have 6 other evidence. 7 MADAM CHAIR: Yes, we do, Ms. Cronk. 8 9 Mr. Martel has raised a question and he 10 would like Mr. Marek's opinion on whether he sees that 11 perception of the public's involvement as being 12 something he would --13 THE WITNESS: Madam Chairman, all my testimony -- this is why I'm here today actually, I was 14 15 waiting for this question. How come -- or you want to 16 start arguing, I'm talking forestry and I'm sorry... 17 MS. SWENARCHUK: Now he tells me. 18 MR. MARTEL: Go ahead. 19 THE WITNESS: Mr. Martel and Madam Chair, 20 one of the problem we have now that indeed public is 21 not trusting foresters. I just had news from British 22 Columbia and I have news all over, even Ontario, which 23 says something like this. 24 MS. CRONK: Well, I'm sorry, Madam Chair 25 and Mr. Martel, to rise on this, and it is important

l	that you receive a full and complete answer, sir, and
2	I'm not objecting to that at all, but I do very much
3	object to perceptions based on hearsay evidence from
4	other jurisdictions.

All this particular witness can respond to is his own personal opinion based on his own observations and his representations of the Beardmore Society.

This is a contentious issue. We've had evidence from a number of foresters who do not agree at all with the views that have been expressed, and I think in the circumstances, therefore, all he can give you is his own opinion based on those he represents, which happens to be Forests for Tomorrow and the Beardmore Society in this part of the world; not B.C. and Ontario at large, and his understanding outside of the boundaries of that.

That's my respectful submission.

THE WITNESS: Madam Chair, are we blind not reading newspaper or lawyers cannot read newspaper?

MS. SWENARCHUK: Excuse me a moment, Mr.

Marek.

I disagree with Ms. Cronk. You have asked Mr. Marek his opinion. His opinion is formed by all of those influences and areas of information that

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1	he has examined and considered as a professional
2	working a lifetime in this field and, in my submission,
3	he's entitled to respond to your question and in that
4	response present to you exactly the sources of
5	information that have influenced his thinking, and if
6	those sources come from British Columbia and other
7	parts of Canada that lead to certain conclusions, I
8	think he's entirely entitled to tell you that.
9	MR. MARTEL: Well, I guess that's why I
. 0	raised the matter. I agree with Ms. Cronk, I've heard
.1	from other foresters, but it's their background from
. 2	where they've heard where they draw from their
.3	experience as to the area they work in, and the forces
. 4	they're influenced by, and so naturally you're going to
.5	get a difference of opinion.
. 6	MS. CRONK: I have no objection to his
.7	opinion being expressed to you at all, sir, it was just
.8	the way that it was starting to be said that caused me
.9	some difficulty because I would be unable to question
20	him about it.
21	I have nothing further to add. I don't
22	mean to delay the proceedings, I'm concerned about what
23	was started to be said.
24	MADAM CHAIR: Mr. Marek, we don't want to

get too far off topic, but obviously Mr. Martel wants

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- 1 to hear your opinion in this matter.
- THE WITNESS: My opinion is that majority
- 3 of public, majority of public I have sampled and I
- 4 represent state this and I'm going to put it in
- 5 nutshell you foresters may argue amongst each other
- 6 what is good or bad, but it's our land and we want to
- 7 have a decision-making process accepting or
- 8 understanding our concerns.
- 9 I know the forestry profession is split
- right in half in each province on how we're going do
- 11 treat our forests; will we treat it as in the past or
- presently as suggested by many people, these
- agricultural approaches; in other words, management
- helping or using agriculture approach.
- On the other hand there are many
- foresters who say, let's change it, let's approach the
- management from the different angle, which I call
- 18 multi-purpose forestry.
- Madam Chair, you cannot have both
- 20 everywhere. There will be certain compromises
- 21 necessary and I think the forester have to agree sooner
- or later which pass Canadian forestry I'm not talking
- about the Ontario forestry, I'm talking about Ontario,
- 24 Winnipeg.
- MR. MARTEL: Mr. Marek, what I'm trying

1	to get at though is the concern the public has. In
2	this you're talking about foresters and they're being
3	split in two and the whole shmear. I'm worried about
4	how the public gets into the act.
5	I mean, Mr. Freidin's question is: Who
6	makes the ultimate decision? If you've got this
7	planning that you're talking about, then who's going to
8	make the ultimate decision; is it going to be the
9	forester in charge of the plan, or is it going to be
10	the public, or what combination or what parameters are
11	going to be there.
12	MR. FREIDIN: In relation to what
13	silvicultural prescription should be implemented to in
14	fact achieve a common objective of getting back a
15	certain kind of forest.
16	MR. MARTEL: Right. And that's what I
17	want to hear. I don't want to hear about the
18	arguements about foresters in various provinces, I want
19	to know what the problem is or what I perceived, as I
20	indicated while I was asking, my perception.

I'm asking you, how do we -- what has

triggered this concern and how do we get around it to

come back to making an ultimate and final decision?

THE WITNESS: What triggered the concern?

The answer is simple, they do not, majority of the

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1 public do not trust decision-makers of today. MR. MARTEL: All right. Then, if you're 2 going to take the next step, how do we involve the 3 public to get -- so that they in fact have some input, 4 but who makes the final decision? I mean, the buck's 5 got to stop somewhere. 6 MADAM CHAIR: We have Mr. Marek's 7 8 evidence on that, he said the forester makes the final decision. 9 10 THE WITNESS: No, Madam, I have -- I'm 11 sorry now we are really bind, because I have stated 12 that the public, our political master in democracy will 13 decide who is right and wrong. After all, I'm just a -- or I was a civil servant and on this other side 14 you have a public, you have a corporation which have 15 their own subjective view on many things, they are 16 17 people in democracy. 1.8 According to my perception of proper forestry is, that indeed our political masters will 19 20 decide what's right and wrong because it's a public, it's a common property of all of us and who else going 21 22 to... 23 But, this decision is based on honest advice of a civil servant, the unit forester for 24

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instance, on the honest perception of the public how

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they see, and many other agencies	1	thev	see,	and	many	other	agencies
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We have to come to some kind of synthesis here where the political master is going do decide, the Minister going to decide: Okay, this is what we're going to do, this is the philosophy we have on forestry in Ontario which may be -- no, economics one way, the other may be ecological consideration and all kind.

They are the master, they will eventually guide our forest industry, our public, including myself, to some conclusion what forestry means.

And one of the problem public has right now says in the economics side of the forestry, which is protected by forest industry, the ecological aspect or the biological cercern, the human aspect of our forestry, and many in the government who cannot make the decision he says: Oh, how should I poke into this, that's -- you know, politics is politics.

But ultimately, Madam Chair, the political decision will be guided or will be guided, like, into the forest implementation of Ontario, and that's all I can say.

MADAM CHAIR: No, that's fine, Mr. Marek.

This has been a very wide-ranging discussion about the forest policy of the entire province of Ontario. I had made the comment about a forester making decisions at

the level of the local forest--

THE WITNESS: In the view of the total forest management planning process, input in it, the forester will -- and perhaps I can add to this, why forester? There are many people nowadays, Madam Chair, who would like -- who wish to take that responsibility away from them.

I represent group, and it's not FFT, it's not any -- who telling me, I don't trust forester to manage that land, I don't trust him with management planning in a process and as a main decision-maker.

I going to put it to the biologist, or I going to put it to the planner, or I going to put it

Mayor of Geraldton for that matter.

No, no, this is the case. I deal with this situation every day, Madam, and it's come again and again the question: Who will be responsible. And I say to this, and I repeat, if our political masters, regardless what party they are, going to decide that forest management in Ontario will be directed in such a way, it's a more philosophical question than anything else, but they decide, then the timber manager, then the company, then the ecologist in democratic process have to accept these decision and manage the forest, because it belongs to all of us.

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1	MADAM CHAIR: Thank you, Mr. Marek.
2	Mr. Friedin?
3	MR. FREIDIN: Q. Let me
4	MS. SWENARCHUK: Next question?
5	MR. FREIDIN: Qtry to focus your
6	mind on a management unit.
7	A. Correct. Let's go to it.
8	Q. Okay. I'm going to go back to some
9	of my earlier questions. I've asked you this about who
10	ultimately decides. We started all of this by me
11	asking you whether a forester on a management unit
12	could decide to plant a cutover before he tried to do
13	natural regeneration on the black spruce, and I
14	understood your evidence to be, no, you must on a
15	multi-purpose forest you must attempt natural
16	regeneration as set out in these
17	A. Right.
18	Qin relation to black spruce first
19	A. Right.
20	Q and you can only plant if the
21	natural regeneration fails; right?
22	A. Right.
23	Q. There are some exceptions we talked
24.	about.
25	A. That's true.

1	Q. Encountering your undesirable forests
2	either because of
3	A. Yes, yes, yes.
4	Qpast practices or just age
5	deterioration; right?
6	A. Yes.
7	Q. Okay. Dealing with that issue, you
8	indicated in your evidence a number of times about the
9	importance of site and species in prescription setting,
10	everything is so site and species-specific.
11	You spoke a number of times about the
12	thousand different forests out there, and it seems to
13	me, Mr. Marek - and I ask you to respond to this
14	suggestion - that your evidence about all these site
15	and species-specific and thousand forests is
16	inconsistent with the proposition that all black spruce
17	sites will always be capable of natural regeneration
18	and, therefore, you should always attempt natural
19	regeneration first; that there are no circumstances in
20	which it makes sense silviculturally and economically
21	to plant first.
22	I see an inconsistency, and I would ask
23	you to respond to that suggestion, sir.
24.	A. Of course I do not see inconsistency,
25	obviously, that's why I had late night and it took me

more than one hour to come to some kind of

"prescription" which represent the FFT and my own

professional opinion.

Sir, may I point out to you again, again, that when our goals and objective will be multi-purpose forest, we have to start basically with natural regeneration to try to accomplish some kind of renewal of the original stands. That's one philosopy.

You are coming to me and say: No, we're going to plant trees and we're going to do what's being done right now in some of the licenced area, on some of the FMA because we going to achieve better production of timber, we going to achieve instead of 10, 15 or 25 cords per acre, we going to achieve 50 cords per acres. This is delusion. These two things do not match.

Q. I'm sorry?

A. These two things do not match; in other words, you can't accomplish these two things.

If you wish to plant, tend, chemically treat the areas, do it in intensive areas, you get what you want maybe, if you don't do it, your tough luck.

But in a multi-purpose forestry your natural regeneration is basically the beginning of the new forest, not replacing forests with something else, but try to duplicate what was there before.

And that is a philosophy which, I think, is accepted throughout the whole world. Industry, of course, opposed to it because they say: I can produce double on the area of what nature gave us, and that may be correct in some instances, but once you have a multi-purpose forest you cannot do it because immediately you are turning multi-purpose forestry into one, maximization of timber management.

Can I be more clear on that?

- Q. And do you hold that view because you feel that when you plant that you are going to end up -- or not be able to comply with the prescriptions that you suggest should be imposed, particularly 1.1(a) that says you should return the stands to the original species and densities; is that the basis for that opinion?
- A. Yes, because you optimize in one case; you try to maximize in your view, and that is the basic different, Madam. You see the difference between optimization and maximization of production of the forest land.
- Q. So in a nutshell then, in multi-purpose forestry, you've said that you're not saying that strip cutting is a panacea, but what you are saying is that we should try it first so that if it

1	works it will be the panacea and, if it fails, we'll
2	try something else?
3	A. Of course, I said it a dozen times.
4	MADAM CHAIR: Mr. Marek, I'm going to ask
5	you a question. I don't want us to get really off
6	track, but it's just a question I have about your
7	philosophy of multi-purpose forest.
8	THE WITNESS: Right.
9	MADAM CHAIR: And in the situation of a
10	multi-purpose forest where a tourist operator said: I
11	want this part of the forest managed so that we plant
12	densely with white pine because white pine is
13	attractive for American tourists and this is what I
14	want done with this multi-purpose forest. It's a
15	ludicrous kind of situation
16	THE WITNESS: Maybe not.
17	MADAM CHAIR: Or maybe not, but those
18	sorts of objectives and multi-purpose forestry
19	THE WITNESS: Exactly.
20	MADAM CHAIR:also work against
21	restoring the forest to what it was. There may be
22	reasons in multi-purpose forests that specific
23	forestation would be done differently.
24	THE WITNESS: That's a special kind of
25	forestry, Madam, special branch of forestry, but it's

possible, it's being done. It's something which we also have to be acquainted with. But, Madam, once you started with it, I appreciate it, and I like to say a few words on danger of these things.

Immediately you talk about paying. If some -- you know, economic tenure and tenure of what I wish forests to be.

If tourist outfitter desires certain forest for his own backyard, my answer to this would be: Okay, buddy, you get your licence on that area approved by the government, approved by the -- it's got to go through the process - and if you got public approval, if you're going to get public approval and government, everybody understand what game we are in, what kind of forestry, you take and rent a licence for that part of the land and you manage it according to the plan.

MADAM CHAIR: You're assuming that it will always be economic tenure that's the issue. It might be a canoe route where canoeists will say: Well, I want you to plant overhanging willows because it's much better than that junky - I don't know - jack pine.

THE WITNESS: Okay. Go through the process, go through the planing process and if in our wisdom decision will be yes, we going to plant willow

1	there, I would say this: You use it, you pay for it.
2	MR. MARTEL: I mean, that is stretching
3	it; isn't it, though?
4	THE WITNESS: No.
5	MR. MARTEL: I mean, tell me a small
6	group of 10 people who like canoe routes - let's talk
7	about Killarney Park, I know a little bit about
8	Killarney Park - you have a number of people who use
9	canoe routes, who come in there, there's no motorized
10	vehicles, the whole business, and you're simply saying
11	to them, this group who have lobbied successfully to
12	get this designated as a park are now going to be
13	responsible for going in.
14	I mean, they're not full time, they're
15	doing it as recreationists, they do it as
16	environmentalists, they do it there's a whole number
17	of reasons. How in God's name could they ever be there
18	expected to go in and do the type of thing you're
19	suggesting?
20	THE WITNESS: Mr. Martel, why should
21	company on a licensed area pay a tenure for that land
22	when they are not using it? Okay. You talk about area
23	around the tourist outfitter
24	MR. MARTEL: But they don't pay tenure
25 .	unless they're utilizing it.

1	THE WITNESS: No, they don't utilizing
2	something, they still pay the management charges for
3	that area. Why? If somebody else uses it and it's
4	taken out of the "timber production", that's what
5	Industry say because they have a God-given right to
6	every tree under licence, as you know, it's a God-given
7	right for last hundred years.
8	Okay. If somebody else prove that it's
9	useful to them, they can use it from cottages right
10	down to reserve, I said: Okay, you take that area
11	under your management and you pay the tenure, you pay
12	the charge.
13	MR. MARTEL: But the public does I
14	mean, the public pays for the tenure out there by the
15	very fact that they contribute every day to the tax
16	revenues of the province.
17	MR. FREIDIN: They pay for management
18	foresters.
19	MR. MARTEL: They subsidize all that.
20	THE WITNESS: Maybe they shouldn't
21	subsidize.
22	MR. FREIDIN: Q. Mr. Marek, the public
23	pays for management foresters; is that right?
24	A. Yes.
25	MR. FREIDIN: I'm sorry, Mr. Martel.

1	MR. MARTEL: The point is made.
2	THE WITNESS: The public pay for civil
3	servant to do certain things. They are getting wages
4	as civil servants, we have to manage it, the estate, as
5	we know, but when you have special requirements like
6	tourist outfitter or the company who claim that area
7	for their own profit, for their own profit, then you
8	have a complete
9	Madam, in Europe this is happening
L 0	frequently. That in Finland you go and they have a
.1	licence for certain area to manage, they do it very
1.2	well as a private they get together, 10 outfitters
1.3	get together or 10 entrepreneurs get together and
L 4	manage the area. They have advisors from the
1.5	government, they have to prepare management plan, and
L 6	it's done very satisfactorily.
L7	MADAM CHAIR: Thank you, Mr. Marek.
18	Mr. Freidin?
L9	MR. FREIDIN: Q. We were talking about
20	building up trust in the public of the foresters. Let
21	us assume, Mr. Marek, that the public on a management
22	unit and the forester agree
23	A. To that
24	Qthat the objective, they have a
25	common objective and it is to have a stand equal to the

- species and density of the stands that are harvested,

 okay, they have that common objective.

 The forester believes based on his
 - professional expertise, experience, whatever, says: I think the way we can do that is "x". The public say:

 No, no, no, we would prefer...
- 7 A. That way.
 - Q. That you do it some other way.
 - 9 A. Okay.

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Q. And the forester says: No, no. If

you do it that way, you won't achieve the objective.

And the public says: But that's the objective and I

want you to try it this other way.

Now, in that hypothetical situation, do
you not agree that the best way to build up trust in
the long run - because we're not going to do it
overnight - is for foresters to make decisions based on
their best judgment and obtain good results and
convince the public through the results that they can
indeed make decisions which will, in fact, achieve
those common objectives?

A. Mr. Freidin, for years foresters have tried to do it. For years, for last 50 years foresters are telling the public this is the best way we can do and, look, they are not being trusted with it.

1	Are we all blind not to see the causes of
2	this problem. That you telling me that the forester
3	for the last 50 years
4	MADAM CHAIR: Just slow down, Mr. Marek.
5	THE WITNESS: Slower?
6	MADAM CHAIR: Slower, please, yes.
7	THE WITNESS: That for last 50 or even
8	more years are prescribing thing the public finally
9	say: No more of this. Aren't you aware of this?
10	MR. MARTEL: Mr. Marek, can you stop
11	right there.
12	THE WITNESS: Yes.
13	MR. MARTEL: You tell me, in the last 50
14	years, where the public had any input at all in the
15	last 50 years?
16	THE WITNESS: Exactly.
17	MR. MARTEL: No, but there's been no
18	public input. You say the foresters have been trying.
19	Now, we've got FMAs in the last 10 years
20	but, in fact, we haven't really developed a we're
21	starting, we're starting to move in that direction, but
22	the cynicism, was it not already there, because for
23	let's take, split your 50 years into 40 and 10, the
24	first 40 years that you're talking about the public
25	didn't have a tinker's dam

1	THE WITNESS: Exactly.
2	MR. MARTEL:to say about what was
3	going on.
4	The last 10 years it is slowly
5	developing, would you not agree, but even then, even
6	then, how much real input has the public had in the
7	last 10 years?
8	MS. CRONK: Well, Mr. Martel, before the
9	witness answers
10	MR. MARTEL: He worked for the Ministry
11	so he knows, he was there in the first five years of
12	the FMA program.
13	THE WITNESS: Yes.
14	MR. MARTEL: So I can ask him what is his
15	experience on the public's involvement in the area he
16	managed.
17	THE WITNESS: Yes.
18	MR. MARTEL: Real public involvement for
19	the five years he was there.
20	MS. CRONK: I only rose, sir
21	MR. MARTEL: I'm simply trying to get a
22	distinction on what he means as between talking to the
23	public and public involvement, and I don't know of
24	where the public involvement really has been up until
25	very recently.

1	MS. CRONK: I rose, sir, not to object in
2	any way to the answer being provided by the witness,
3	but simply to, for I hope your assistance, to recall to
4	you that you have received considerable evidence about
5	the steps taken to date and the steps that might be
6	taken.
7	MR. MARTEL: Yes.
8	MS. CRONK: That is a contentious issue,
9	and I was a little concerned that we might again have
.0	an opinion at large from the witness that's going to
.1	cause us all trouble at the end of the day.
.2	MR. MARTEL: Go ahead.
13	MADAM CHAIR: Mr. Marek, I think you're
14	being asked very big questions. Maybe we can take them
15	apart in pieces and allow you to respond to what Mr.
16	Martel is asking you. We know what your opinions are
17	generally about public participation.
8	THE WITNESS: That's right.
L9	MADAM CHAIR: Mr. Martel is asking you
20	specifically in the last five years, you were at the
21	MNR, did you see a change in public participation and
22	do you have a view about how effective it was or
23	whether it can be made more effective?
24	THE WITNESS: Madam Chair, my experience
25	with public participation was in not in last five

- years because I didn't --
- 2 MR. MARTEL: 80 to 85.
- 3 THE WITNESS: But I'm talking from
- 4 80-85--
- 5 MADAM CHAIR: That's what I'm talking of
- 6 the last few years--
- 7 THE WITNESS: Even before that.
- 8 MADAM CHAIR: --at MNR.
- 9 THE WITNESS: Because this has been hotly
- discussed during the FMA constructions, they had a base
- 11 in their discussion.
- But may I state here very clearly that we
- were told on many, many occasions since 1972 that we as
- a public servant are to obey the orders; in other
- words, when our political masters, whoever was the
- Minister of Natural Resources, from Bernier right on to
- last one, from Frank Miller right on to last one who
- was it? but 1985 one direction we had, was when you
- deal with public don't, under any condition, mention
- your forestry or public opinion -- pardon me, personal
- 21 opinion. You are here to listen to the instruction
- from the above, you respond. If you cannot respond
- 23 say: I don't know.
- Now, this is a simplification of the
- 25 process, Madam. But that brought MNR in such a hot

L	trouble that we at the public meeting on many occasions
2	standing there and somebody came and says: What do you
3	think, George Marek, you were working as a timber
1	forester or management forester or supervisor for last
5	20 years, what do you really think about it? I had to
5	say: I'm sorry, I don't know.

Now, that is changing because Ministry knows now, or the government knows that this does not work, because they know now concrete problem with this I don't know syndrome or, I have to wait until somebody else come or, my supervisoor told me I cannot talk about it. And so that was a problem which we inherited.

Now, after '85, as a consultant and as a people who deal with problem, it's interesting to note that this recovery of MNR into the new period of enlightenment, I will say, yes, we need a public because otherwise you know what they can do to us and so on;

Yes, there is a effort being made to communicate with public, but what bothers me is that that kind of communication is that still you have that syndrome behind where everybody says: What can I say, there's the Secrecy Act, there's -- can I say that, because I cannot -- I may get fired or demoted or

- whatever, promoted. 1 2 This is so deeply entrenched, and that 3 start this re-organization 1972, where we were told 4 under certain terms, you obey. You are here to listen to us, never mind your professional and scientific and 5 whatever Mr. Freidin is talking about, your grand 6 7 scientific know-how; never mind, you are here to listen what we... That is the problem. 8 9 MADAM CHAIR: Thank you, Mr. Marek. 10 MR. FREIDIN: Q. So, in a nutshell, sir, 11 you think there is some deeply entrenched fear of foresters to, in fact, describe what they feel is 12 13 appropriate for the betterment of the forest? 14 A. Not all, but many of them in public 15 service. 16 Q. Right. Now, that's a separate issue from the issue of how much discretion they should have 17 to make those decisions, assuming they didn't have the 18 19 fear, the ones that don't have the fear surely--20 Be fired. 21 --should have the -- they all get Q. 22 No, you're saying -- I'm being very serious 23 now. Are you saying that --A. Sir, I went through that. 24
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We talked about a new process, you

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have no experience with the process other than as a consultant as you indicated, and you've already spoken 2 3 about the extent of your experience with the new process that's been in place since 1985. 4 5 As a consultant, yes. Α. 6 Q. Right. 7 Who deals with government very, very frequently, sir. 8 9 Do you not agree -- do you agree with 10 me, Mr. Marek, that if in fact there has been cynicism 11 built up over the last 40 years --12 MADAM CHAIR: Excuse me, Mr. Freidin. ---Discussion off the record 13 14 MADAM CHAIR: Why don't we finish with 15 your question, Mr. Friedin, and then we'll take our 16 morning break. 17 MR. FREIDIN: Okay. 18 Q. If there has been cynicism built up 19 as discussed over the first -- particularly the first 40 years or the last 50 years. 20 21 Α. Yes. 22 And the process is changing. Q. 23 Yes. A. 24 0. And we have a new timber management 25 planning process which has been in place since 1985--

1	A. Yes.
2	Qwhere the Ministry is, according to
3	you, making an effort to consult with the public
4	A. Yes.
5	Qto get input from the public, would
6	you agree with me that that cynicism is not going to
7	disappear overnight?
8	A. Agree.
9	Q. It's something that's going to have
10	to be worked at over time to regain any trust or to
11	alleviate or reduce that cynicism?
12	A. Yes.
L3	Q. And do you not agree with the
L4	proposition, sir, that a good way of doing that is
L5	for assuming we have a certain objective for an
L6	area, that the objective is achieved through
L7	silviculture, good silviculture?
18	A. Very good.
L9	Q. Who cares, it's achieved through
20	silviculture?
21	A. Yes, yes.
22	Q. And during this process of change,
23	this period where this cynicism will be reduced, if
24	trust will be built up by achieving the common
25	objective, would you agree with me that where

1	achievement or non-achievement of that objective is
2	dependent on whether the silvicultural prescription is
3	the appropriate thing from a silvicultural point of
4	view, from a biological point of view, that when there
5	is no consensus, when there happens to be conflict
6	during the period of change, that the buck has got do
7	stop, and the responsibility and the authority to make
8	that ultimate decision has got to lie with the
9	professional, and that is the management unit forester
0	who is being paid by the public to be a professional
1	and make those very kinds of decisions?

A. Mr. Freidin, I'm a forester and I would love, I would love that this can be accomplished, this goal what you talking about, the situation where we point out that the foresters or forestry profession or government agents and government people and for a private company people, that we have more trust in the people.

But may I point out to you, sir - and I repeat it and I have to repeat it again - it's up to government, it's up to Ontario Government to put the ground rules to this process.

Silviculture will be part of it, the prescription will be part of it, the communication will be part of it, but finally, may I suggest to you again,

that our government have to take the concrete

responsibility of managing our own estate, guide the

professional people you talk about, in other words

including myself, into performing something which I

feel is a government responsibility.

of Ontario will be clearly clarified and classified and said, here Crown Timber Act says this, the Crown Timber Act is the law, you cannot have a professional opinion, sir, unless you are backed up by law in forestry.

The forestry got to dictate, if you're going to have a merchantable stick of 4 inches diameter or 10 inches diameter, you cannot practice silviculture without law backing you up, yet you indeed must do this or should do this.

In other words, certain standards, certain standards, and they have to come from the government, in order to protect the forester when he implements his program.

Sir, you can be an Albert Einstein, you can be Albert Einstein and start practising forestry, there always will be one problem, that Albert Einstein going to come and say: Government, what is your goal or objective? What I may do, what I may not do. What I should do, and so on.

1	This is gotten to be written in the law,
2	and one of the problem we have for many years that we
3	haven't got a law to back up that forester or that
4	manager that he can say: Yes, this is - I'm following
5	the regulation in the Crown Timber Act or in the
6	general rules of the government. We haven't got that.
7	Q. The law that you would want to see is
8	a law which would allow the professional forester
9	A. Practising profession
.0	Qthat freedom to, in fact, or
.1	exercise his discretion to make the decision that he or
.2	she feels is the best for the forest and not worry
.3	about someone coming down on them for it; is that it?
. 4	A. Not at all. We have a basic
.5	misunderstanding what forestry profession is all
.6	about any profession.
.7	You have, sir, in any profession law
.8	saying take nursing profession, take medical
.9	profession, take engineers law, take engineers
20	Q. Yes.
21	A. Every say or claim certain allegiance
22	to something. Look at the foresters, their allegiance
23	to whom, to public, to employer? But nobody mention
24	the forest land.
25	Why don't we have a Code of Ethics

1 perhaps written in Crown Timber Act where the forester or professional man is bound to plea allegienace to the 2 forest land instead of Abitibi or George Marek to his 3 consulting firm, and I don't know. Why is it? Would 4 5 you explain it to me? 6 Madam Chair, this is a very important subject because I think in order to practice good 7 forestry we need back-up, and that back-up is in the 8 hands of the government. 9 10 MR. FREIDIN: I think that might be a 11 good place to have a break now. 12 MADAM CHAIR: Thank you, Mr. Freidin. We'll take a 20-minute break now. 13 ---Recess at 10:35 a.m. 14 15 ---On resuming at 10:55 a.m. MADAM CHAIR: Please be seated. 16 17 MR. FREIDIN: A housekeeping matter, 18 Madam Chair. I just was speaking to Mr. Greenspoon, 19 I'm not too sure exactly what it was I said yesterday that I would speak to him about, but hopefully the 20 information I have will hit the mark. 21 22 He indicated that his client, I guess is 23 Northwatch. 24 MS. SWENARCHUK: No. 25 MR. FREIDIN: Northcare?

1	MS. SWENARCHUK: Yes, Northwatch, sorry.
2	MR. FREIDIN: Northwatch, yes.
3	Northwatch would want to present their evidence in
4	North Bay or New Liskeard but they have not made a
5	decision yet as to which location.
6	They have retained a consultant, but
7	they're really at the very initial stages of putting
8	together a case, but he believes a week in direct
9	evidence is the best estimate he can give at the
10	moment.
11	In terms of lead time, he indicated that
12	his consultants have been told sort of start but don't
13	really get going until we know when we are going to be
14	presenting our case.
15	He indicated to me that he thought he
16	would need three to six months notice or lead time to
17	sort of get his consultants up to speed and get
18	everything prepared, and he indicated that he was led
19	to believe, based on conversations with parties he
20	didn't name, that their case would not be presented
21	until 1992.
22	So I guess it depends on what the
23	satellite hearing schedule would be, and I'm not aware
24	of what that is, but that's his understanding at the

25

moment.

1	So I guess Mr. Pascoe can take the
2	transcript and follow up, if required.
3	MADAM CHAIR: Thank you, Mr. Freidin.
4	And so Mr. Greenspoon's understanding that other
5	parties would be presenting evidence as well at North
6	Bay and New Liskeard?
7	MR. FREIDIN: Yes, yes. I told him that
8	in conjunction with one of you know, with the
9	satellite hearing. So I didn't say that expressly, but
10	I'm assuming that he understood that.
11	MADAM CHAIR: All right. Thank you very
12	much.
13	MR. FREIDIN: Q. Okay. Could we go back
14	to the Forests for Tomorrow terms and conditions,
15	please.
16	A. Yes.
17	Q. And the second line, first page, you
18	described ecological sustainability yesterday, you
19	indicated that that was that concept of returning the
20	stand or the cut-over to the species that would have
21	been there by nature had natural disturbance been
22	allowed to proceed and natural succession occur?
23	A. Yes.
24	Q. You've spoken about intensive
25	forestry areas, areas where there would be a single

1	purpose of timber production?
2	A. Maximization of timber production.
3	Q. Yes. Am I correct that in those
4	areas that you would be attempting to develop stands -
5	or pardon me, you would have to be eradicating species
6	and one of the purposes would be to have new stands
7	which were as pure as possible in terms of the species
8	you were trying to regenerate?
9	A. Maximize the yields, maximize the
10	timber production and I think it should be very clear,
11	the objective. Maximization of timber production.
L 2	Q. Okay. And, therefore, this concept
13	then of ecological sustainability would not apply in
14	those areas?
1.5	A. Ecological sustain as compared to
16	the previous stands, or the previous ecosystem?
17	Q. Yes.
18	A. Yes.
19	Q. It would not it would not be one
20	of the objectives?
21	A. The objective is strictly timber
22	production, timber fibre production.
23	Q. Not ecological sustainability as
24	you've defined it. Not ecological sustainability as
25	you've defined it?

1	A. Yes, yes. I would like to adverse
2	that the ecological sustainability of the production of
3	the sites have to be considered in order to maximize
4	the timber production also.
5	Q. Right. We're talking about the
6	ability of the site to produce what you're trying to
7	achieve?
8	A. So you have to consider biological
9	productivity otherwise it doesn't make sense.
0	Q. I understand. Thank you very much.
.1	Now, looking at the terms and conditions again on the
.2	first page, if I can direct your attention to 1.1(c).
.3	A. Yes.
.4	Q. And you note it indicates that:
.5	"Silvicultural prescriptions shall
.6	minimize or prevent site damage by the
.7	proper use of appropriate harvesting and
.8	site preparation equipment."
.9	A. Correct.
20	Q. And in (d) it indicates that:
21	"Silvicultural prescriptions shall
22	maintain or enhance the productivity of
23	the site."
24	A. Yes.
25	Q. Now, would you go up to the very

1	first paragraph on the first page and would you look at
2	the second sentence. It says at the present time:
3	"The MNR shall ensure that no site damage
4	or productivity loss results from these
5	particular items listed as 1 to 4."
6	A. Yes.
7	Q. Would you agree looking at (c) and
8	(d) which we've reviewed which say minimize or prevent
9	or maintain or enhance.
.0	A. That's right.
.1	Q. That if we changed the second
.2	sentence in the first paragraph to read:
13	"MNR shall through its prescription
4	setting and their implementation minimize
15	or prevent site damage or the reduction
16	of site productivity due to these four
17	things", that that would be consistent
18	with what you are attempting to achieve through (c) and
19	(d)?
20	A. Well, Mr. Freidin, I just feel that
21	you try to put the words in my mouth here or words in
22	this statement which already we agreed upon and to try
23	to change the context. Would you repeat it again for
24	my benefit, just so I have some grip where you are
25	leading.

1	Q. Let me come at it a little bit more
2	directly.
3	A. Yes.
4	Q. When you read (c) and (d) it says
5	when you set these prescriptions, the standard what
6	you have to do, the purpose is to minimize or prevent
7	the site damage.
8	A. Site damage. Okay, that's clear.
9	Q. If we go up to the second sentence in
. 0	the first paragraph, it says:
.1	"MNR shall ensure that no site damage
. 2	occurs."
.3	Now, there's a difference between saying
4	you must ensure that no site damage occurs and an
.5	obligation that says you shall make prescriptions which
. 6	will minimize or prevent. When it says minimize
.7	A. By preventing you minimize.
.8	Q. Well, all right. When I read those
.9	words, minimize or prevent.
20	A. Yes.
21	Q. It accepts the premise that you can't
22	in every circumstance
23	A. Oh.
24	Qavoid every effect. So it says, we
25	want you to minimize it and, if you can, prevent it:

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and that is different. If you say to somebody: Try to 1 prevent it and, if you can't, minimize it; that's 2 different than saying you must ensure that no damage 3 4 occurs. And all I'm trying to do is make sure 5 that we don't have inconsistent wording in the 6 suggested terms and conditions? 7 8 A. All I can say, sir, that these are 9 logical, very logical terms used frequently in forestry 10 in achieving, say, the sustainability of production, the sustainability or perpetuation of the ecosystem, 11 and the term minimize or--12 13 O. Prevent. 14 A. --prevent is a beginning of these 15 qoal. 16 Q. Yes, I understand that. 17 Well... Α. 18 But in forestry you can't guarantee 0. 19 that there is not going to be some damage. You can't 20 quarantee that; is that true? 21 A. Yes. That's a relative term, a 22 relative concept. 23 Q. Yes. So would you agree then that 24 the terms and conditions, if they are to reflect 25 reality, should not impose an absolute obligation that

1	no site damage should occur, it should actually say,
2.	again, make sure that your silvicultural prescriptions
3	are designed such that you are endeavoring to prevent
4	or minimize; where it is just impractical, I mean, it's
5	impossible to ensure, guarantee no damage?
6	A. Sir, I know exactly what you are
7	aiming at and you are talking about degrees, exactly,
8	degree; how much is too much, how little is too
9	May I point out to you, sir, that in
10	forestry this term to minimize or mitigate are being
11	used presently so freely that it bothers me and it
12	bothers many other people who see the damages actually
13	done on the site itself in the practice.
14	And, Madam Chair, you have seen my
15	slides. Again I have to go back, where what is bad,
16	what is minimum or what is relatively minimum, these
17	terms do bother me and I think that to appropriate in
18	legal terms how much is too much, how little is too
19	little.
20	So it's again in the hand of the forester
21	manipulators who, by sound judgment and by
22	prescription, back up by laws will state: Okay, this is
23	too much and this will be penalized, this will be
24	penalized.

25

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And I think what you are aiming at,

1	counsel,	is	the	fact	that	indeed	we	are	deal	Ling	with
2	serious	infr	acti	lons (or pe	rturbat	ions	cau	ised	by ·	our
3	activity	to	the	fore	st la	nds.					

And when I was preparing this statement I was aware of, again, the degrees we are talking about. And perhaps here is a very important role of timber manager or forest manager for that area who will anticipate, who will very carefully evaluate such possible damages and present them into the timber management plan, put them in FEC as a guide book and I am missing that guidelines in the FEC and it's pointed out in my testimony.

Q. Right, we'll deal with that later.

A. Right. So right here for me, you know, in three or four pages deal with this issue, is something which I hesitate to do because there will obviously be follow-up to this which may be more precise in dealing with some of these issues.

MR. MARTEL: Could you put the one word in, the MNR shall endeavour to ensure. That then — because you can't guarantee that there will be no site damage, but it doesn't water down what you're attempting to achieve through good practices that you want to see in (c) and (d), and it gets around Mr. Freidin's concern I think, that you can't — you can

never quarantee, there's no absolute. 1 2 THE WITNESS: No. 3 MR. MARTEL: I can understand what you are driving at, and I just wonder if you include that 4 5 in, the MNR shall endeavour to ensure, that means that you are working towards a goal, always it's out there--6 7 THE WITNESS: That's right. right. 8 MR. MARTEL: -- and you want your people to work towards that goal, and it doesn't water it 9 10 down, I don't think, it makes it really encumbent on 11 people to do that. On other hand, it doesn't say, well if you can't guarantee it, there's no forestry. 12 13 THE WITNESS: That's right. 14 MR. MARTEL: And so I just wonder if that is some sort of acceptable wording to add those two 15 16 words, 'endeavor to'. It makes more sense. THE WITNESS: Mr. Martel, I agree with 17 you and perhaps attempt will be made to rectify the 18 situation and would include. I have to discuss it with 19 the Society in Beardmore because they approve this, and 20 I have to also discuss it later with the counsel. 21 22 MR. FREIDIN: Q. Your personal view is 23 that that's an okay change, but you would want to 24 discuss it with your client? A. I personally agree, yes. See, I'm 25

1 not an English language expert, sir, and some of these nuances which you fellow have advantage, I appreciate 2 3 because I'm in the process of learning myself. Q. Okay. Thank you very much, Mr. 4 Marek. Let's go down to 1.1(a) again, this is the one 5 about the species and density. 6 7 Α. Yes. 8 0. Now, when you were being 9 cross-examined by Ms. Seaborn, the Ministry of the Environment--10 11 A. Yes. 12 --you made the comment in relation to Q. 13 another -- well, you made the comment, if we harvest 14 black spruce stand we should have black spruce stand, 15 unless more important factors occur which lead to our 16 inability to achieve that. I think we are talking 17 about natural disturbance or something? 18 A. Oh yeah. 19 But then you said, when we harvest a 20 working group poplar, jack pine, black spruce--21 Yeah. Α. 22 --we should keep that working group 23 in place, we cannot abandon our forest land. 24 A. Yes, yes. 25 Q. Now --

1	A. That's my own words, sir.
2	Q. Yes.
3	A. And perhaps there is a farther
4	improvement in my English there. I feel strongly that
5	once we have precedence of natural stands, we should
6	try to perpetuate them, yes. That's what I meaning
7	there.
8	Q. And if 1.1(a) indicated that what we
9	should be doing was to endeavour to achieve in the
10	lowest cost to the public to regenerate stands of the
11	same working group as the stand that was harvested,
12	would that be sufficient or would that change the
13	intent of 1.1(a)?
14	A. Sir, I think the intent is very
15	clear. If your commitment is to perpetuate something,
16	you just perpetuate and do best you can in order to
17	perpetuate the system, and when you I see your
18	intent, sir, you are telling me that we can improve
19	upon, and I'm asking you back, in what sense, in which
20	way because, you know
21	Q. I think I have your answer and I'm am
22	going to move on, I don't think it's a matter that we
23	should spend a lot of time on. Okay?
24	A. Well, for sake of clarification I am
25	curious what you have.

1	Q. I just wanted to know whether if we
2	changed the phrase species and density of the stands
3	that are harvested, to working group of the stands that
4	are harvested, whether that would change the meaning?
5	A. Change the meaning which way?
6	Q. The meaning or the intent of 1.1(a)?
7	A. I don't think it should.
8	Q. Thank you. Now, if I can move on
9	then with these terms and conditions, and let me stay
1.0	on the first page. 1.1(ii), you want to endeavor to
11	ensure that no site damage or productivity loss results
12	from improper or inappropriate timing of harvesting.
13	A. Yes.
14	Q. We are talking about the season of
1.5	harvest, is that what we're talking about?
16	A. That is correct, that is correct,
17	season, timing.
18	Q. And does the reference to timing
19	refer to anything else, or was it meant to really
20	address this season of harvest issue?
21	A. It also means, it also means that the
22	timing of harvesting affects considerably the timing of
23	silviculture.
24	Q. Yes.
25 [.]	A. Renewal, and perhaps again this

1	perhaps should be explained in detail and perhaps we
2	should elaborate more later on when we are going to
3	analyse these prescriptions and there may be many of
4	them.
5	I would like to point out to you that the
6	goals of integration of harvesting and silviculture is
7	based on timing in many instances, and I just put it
8	down as a paragraph that improper and inappropriate
9	timing of harvesting is the goal.
10	Q. I understand the point you're making
11	A. Yes.
12	Q. Thank you very much. Could we go
13	down
14	MS. SWENARCHUK: Obviously if MNR is
15	prepared to sit down and negotiate our prescriptions,
16	we would be pleased to do that.
17	MR. FREIDIN: We'll talk about that
18	later, Madam.
19	MS. SWENARCHUK: Our differences seem
20	smaller than I expected.
21	MR. FREIDIN: Q. 1.1(d) - I find this
22	very efficient - 1.1(d):
23	"Maintain or enhance the productivity of
24	the site."
25	In this particular case, does

- productivity refer to more than the nutrient status of 1 2 the site? The productivity of site, Mr. 3 A. Freidin, is very complex and when you try to tell me 4 5 that what productivity means, I could go back of different stages of productivity, different fluxes, 6 different ecosystem stages and so on. In order to get 7 what we had before, and that is the purpose of this--8 9 0. Yes. --we certainly should maintain the 10 11 productivity. Now ... 12 I don't want to interrupt you, but I want to sort of see if I can help it. 13 14 No, no, go ahead. 15 Are you saying that the measure of 16 productivity then is whether in fact you get back what 17 in fact you had there before when you're talking about 18 multi-purpose forest areas? 19 A. Yes, very much so. 20 That's the measure? 0. 21 That's the measure, what nature gave 22 us through thousands of years and nature through their 23 own means produce the resources, that should be our 24 goal.
- Q. All right.

1	A. That's what I call sustainable
2	forestry or something which has something to do with
3	it.
4	Q. All right. Thank you, that's
5	helpful. Can we go to subparagraph (e)?
6	A. Yes.
7	Q. Indicating that:
8	"Prescriptions shall maintain or enhance
9	habitat for all native species of
0	wildlife, including plants"
1	A. Yes.
2	Q. "so that natural balances are
.3	achieved in the workings of the forest."
4	Could you explain for me what is meant by
.5	natural balances in this context and how one would
.6	measure it?
.7	A. The natural balances are measured by
.8	the ability of site to produce or sustain the
.9	biological, physical product and physical products.
0	The productivity can be measured by input and output of
1	energy, it can be measured by productivity or
2	production of carbon. There are many measures of
!3	productivities.
14	In this case, at different stages of the
15	ecosystem dynamics, we cannot as yet exactly measure,

1	exactly measure the input and outputs because we	
2	haven't got the means to measure the inputs. The	
3	outputs are measurable due to the production of carbon	
4	and material which gets out of the ecosystem.	
5	Q. Yes.	
6	A. But we haven't got a very good idea	
7	how the input works, and there are different inputs and	
8	outputs throughout the dynamics of the total ecosystem.	
9	We talk about steady state, we talk about degradation	
.0	state, we talk about the fluxes, the exchanges between	
.1	the ecosystems.	
.2	Q. Mr. Marek?	
.3	A. Yes.	
. 4	A. Yes. Q. The topic that you're talking about	
. 4	Q. The topic that you're talking about	
. 4	Q. The topic that you're talking about is the nutrient cycling which we've been through and	
. 4	Q. The topic that you're talking about is the nutrient cycling which we've been through and the thing that I would like to focus on, if I might, is	
.4 .5 .6	Q. The topic that you're talking about is the nutrient cycling which we've been through and the thing that I would like to focus on, if I might, is the reference to native species of wildlife, leaving	
.4 .5 .6 .7	Q. The topic that you're talking about is the nutrient cycling which we've been through and the thing that I would like to focus on, if I might, is the reference to native species of wildlife, leaving aside the reference to plants which we can get to.	
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.4 .5 .6 .7 .8 .9 .9	Q. The topic that you're talking about is the nutrient cycling which we've been through and the thing that I would like to focus on, if I might, is the reference to native species of wildlife, leaving aside the reference to plants which we can get to. A. Oh, you didn't say that, sir. Q. Native species of wildlife: "Maintain or enhance habitat for all native species of wildlife"	

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1	What is meant by natural balances in
2	relation to native species of wildlife and how does one
3	measure it?
4	MS. SWENARCHUK: Could I suggest that the
5	panel that MNR excuse me, FFT will produce on
6	wildlife and biodiversity is the area in which that
7	subject will be discussed in detail, and it might save
8	time of the Board if that question was directed more to
9	that panel.
10	MR. FREIDIN: All right. I have no
11	problem with that.
.2	Q. Then just one question, remaining
13	question, Mr. Marek. Did you have an understanding of
4	what natural balances in relation to wildlife meant
15	when you endorsed this particular paragraph?
16	A. Yes, I did.
17	Q. All right. And could you tell me
8	what your understanding was then, so that I know what
L9	it was that you were endorsing?
20	A. I'm endorsing multi-purpose forestry,
21	that was one of the reason because we talk frequently
22	of multi-purpose forestry; and, secondly, I endorse it
23	through my experience with species like moose which is
24	a part of the boreal forest ecosystem and it's a very

important part of it, by having some input into its

25

1	management or into its presence in the ecosystem.
· 2	Q. Okay, fine. I'll take Ms.
3	Swenarchuk's offer suggestion and I'll take this up
4	with another panel. One last question hopefully in
5	relation to (h).
6	A. Yes.
7	Q. Where you indicate that:
8	"Natural regeneration should be used
9	on stands capable of naturally
10	regenerating to primary coniferous
11	species."
12	Can you just clarify for me, sir, in
13	accordance with do these terms and conditions, is it
14	the intent that these terms and conditions will permit
15	or will allow the tending of naturally regenerated
16	stands?
17	A. In multi-purpose forest.
18	Q. Yes, sir.
19	A. In multi-purpose forest, Mr. Freidin,
20	the ideal situation be that we can or we will
21	perpetuate the specie in the ecosystem or species or
22	association of species in that biome in such a way that
23	we don't have to tend.
24	Now, that is ideally speaking, ideally
25	speaking. In other words, that we can perpetuate

forest's natural regeneration of black spruce working
group back into natural regeneration of the same
species without any tending.

- Now, if tending is required, if tending would be required, and this is again very important part of the timber planning process of forest land management, what decision will be made to deal with this issue?
- I like to tell you, sir, that presently we have a problem of tending across the board in the so-called extensive management which is here, okay, it's extensive management.
 - Q. This is your large areas?
- A. Large areas which are clearcut or trees were removed, some species were removed, some species were left standing. So we have a really problem: What you going to do with the competition if you as a manager choose protect the "crop trees".

 And I think there are as many opinions what to do and how to do this as probably as many problems.

I think that this FFT draft terms and conditions deals with that issue by saying that if the goal of management is a forest very similar to the one which were there before, the manipulating of the tending and means to achieve it will be, again,

1	depending on professional knowledge and professional
2	knowledge of the country or of the stands, goals and
3	objectives to perpetuate these stands, and it is hoped
4	that the decision will be as scientific as possible.
5	Q. In the multi-purpose forest where the
6	ideal does not occur, is the option of tending
7	permitted?
8	A. It could be permitted under certain
9	circumstances.
10	Q. And those certain circumstances not
11	being specified herein, can I assume that that decision
12	would have to be a decision within the discretion of
13	the management unit forester?
14	A. Oh, I don't think so. I think again
15	we go back, sir, into the total input, into the
16	planning process where stipulation will be made and
17	certain prescription made in detail how to deal with
18	this.
19	Q. Right. But assuming it gets put into
20	the timber management plan, the ultimate decision as to
21	whether it needs tending and how the tending will be
22	done will be the decision of the forester; is that
23	right?
24	A. In multi-purpose forestry, sir, the
25	input will be also from public which may say, as

1 example, this: No chemical tending will be done in 2 that area, and the unit forester or the manager or so 3 on, bind by this decision put into the timber management will have to perform as stipulated; in other 4 5 words --Is it your -- sorry, go ahead. 6 Q. 7 What you are trying to tell me, the management forester say: Okay, this going to be 8 9 tending and that's going to be it. What I'm trying to 10 convey here to all of you, that this decision will not 11 only the timber management decision; in other words, 12 the management forester going to say this going to be done, it's going to be a synthesis of input where the 13 14 forester will be bind to --Will be what? 15 0. 16 A. Bind to, to the decision, bind... 17 MS. SWENARCHUK: Bound. 18 MR. FREIDIN: Bound? 19 A. Bound. 20 All right, sorry. Bound by the 0. decision? 21 22 Α. Bound by the decision. 23 In the timber management plan? Q. 24 That's right. Α. 25 And I think we have already canvassed Q.

L	the issue as to what happens if there is no consensus
2	between the forester and the public on that issue, and
3	I don't think we need to review that again, unless
1	there's something you want to add.

A. If there is no consensus of timber management planning, then we are all losing, sir. We have to have plans which will be accepted to all parties, agreed upon, then only can timber management forester or management forester in that area provide these answers.

Q. Mr. Marek, based on your evidence there wouldn't be a timber management plan in this province because no one agrees on everything at the present time, and you have indicated to me, while we deal with this cynicism, in the future there won't be agreement on everything all the time.

So we're back to dealing with reality, sir, that there will on some issues be a lack of consensus, we have to work towards improving that?

A. Indeed.

Q. And I'm saying, while we're working towards that, when that consensus is not reached and it's a matter of the silvicultural prescription which is necessary to achieve a common objective, that decision has to rest with the person who knows about

- silviculture, and that's got to be the professional forester.
- A. Sir, if this going to happen and I
 hope it will not happen, because that will be disaster,
 we would have disastrous consequences to all our forest
 management but say if this will happen, in case you
 are right, and you are cynical that we as Canadian or
 Ontarions cannot agree on simple management plan.
- Q. All right. You wouldn't want to

 see -- when you say you wouldn't want to see that

 happen, you're referring to lack of agreement?
 - A. That there will be disagreement.
- Q. Yes.

12

21

22

23

24

2.5

- A. And confrontation--
- Q. Yes, okay.
- A. --of ideas where one group going to
 say this, the other one group going to say that, and
 eventually you going to find suddenly chaos, which I
 see right now in organization I have privilege to deal
 with.

Then, sir, I would suggest to you that the unit forester who will make the final decision will continue in the kind of damper or in kind of confusion which we have had in the past and, of course, we going to have.

Marek cr ex (Freidin)

1	Q. Okay, thank you.
2	MADAM CHAIR: Mr. Marek, you might have a
3	situation where, with respect to the example of
4	chemical tending, the forester listens to the public
5	and the public is well represented and it's very
6	obvious that in a certain piece of forest, and let's
7	say it's a multi-purpose forest under your proposed
8	scheme.
9	THE WITNESS: Proposed scheme, yeah.
10	MADAM CHAIR: The public is saying no
11	chemical tending, and the forester says: Well, I hear
12	you loudly, there's no possibility of me
13	misinterpreting that you're telling me you don't want
14	chemical tending.
15	THE WITNESS: That's right.
16	MADAM CHAIR: And as the forester, I'm
17	telling you that under those conditions I can't promise
18	to guarantee you a new forest in 20 years but I
19	understand what you're saying and we're going to not
20	have chemical tending.
21	Now, in the timber management plan, does
22	the forester say: Yes, I've accepted the public
23	opinion, I respect it, because I know why they don't
24	want it, but I'm writing down here myself that I cannot
25	provide the sort of forestry that I might have had I

- been able to use that tool.
- 2 Do you see the forester taking those
- 3 kinds of positions, because Baskerville certainly does,
- 4 Baskerville says you tell the public what the costs are
- 5 going to be as well as the benefits.
- 6 THE WITNESS: He present his case.
- 7 MADAM CHAIR: Mm-hmm. And if he loses,
- 8 although there is no losing and winning.
- 9 THE WITNESS: He lost.
- 10 MADAM CHAIR: If he can't do what he
- 11 thinks he should do --
- 12 THE WITNESS: He lost, He lost, Madam.
- 13 Let me tell something from the history, that foresters
- and forest manager lost many battles that way, but they
- 15 had to.
- Madam, you don't have a chemicals in
- Europe, for special occasion and on research plots,
- 18 yes. People in Europe, in Sweden and Scandinavia say
- no chemical, and forester says: Look, I could do it
- cheaper, I could do it this way. It's not recognized.
- 21 The public is the boss and the politicians who are
- recommending the public, they said no chemical and that
- 23 is it, so...
- 24 MADAM CHAIR: Well, Ontario isn't Europe.
- THE WITNESS: I realize that.

Marek cr ex (Freidin)

1	MADAM CHAIR: But let's say that there
2	were situations where the forester did respect the
3	public opinion, and would you say that that is a
4	successful outcome of a process of public
5	participation?
6	THE WITNESS: Madam, what choices do we
7	have, steady fight or steady confrontation, or should
8	we live in peace and understand each other better and
9	involve perhaps with more understanding, and that is
10	the role of foresters, Madam.
11	I think the forester right now is not in
12	position say I am right hundred per cent. He cannot
13	impose it, so let's stop and let's start conversing,
1.4	understand, see results. See results, Madam, that's a
1.5	very important aspect.
16	MADAM CHAIR: Mm-hmm.
17	THE WITNESS: And I think that's perhaps
18	where we should start. And please, do not - how should
19	I put it - when you have such a diverse opinion what
20	forestry is all about, what foresters have asked for
21	last 40, 50, hundred years, get the timber, get the
22	timber, invest timber someplace else, and then have
23	profits and so on. It's going to be difficult to start
24	more kind of human-like approaches to forest
25	management.

1	But one of the greatest challenge to the
2	forester right now, the manager, and he's talking about
3	management and he's talking about timber production,
4	that we somehow going to start a process of really, No.
5	1, better understanding the forest because we don't in
6	the first place, our information are lacking many, many
7	crucial aspects of good forestry because we are new
8	country, we started forestry I think that this kind
9	of thing we have to start with.
10	MADAM CHAIR: Thank you, Mr. Marek.
11	MR. MARTEL: Can I ask one question. In
12	your new forest you've got two forests, you've got
13	the intensive forest and you've got the multi-purpose
14	forest?
15	THE WITNESS: Right.
16	MR. MARTEL: Do you envisage cutting in
17	the new forest, or the multi-use forest?
18	THE WITNESS: Of course.
19	MR. MARTEL: The multi-use, okay.
20	THE WITNESS: Of course.
21	MR. MARTEL: The other one you just want
22	to maximize in the other
23	THE WITNESS: Exactly.
24	MR. MARTEL:and carry on
25	THE WITNESS: Optimize. It's the

1	maximization against optimization, Mr. Martel, and we
2	have to deal with these two concepts in more detail
3	before we accept or we adopt it, or we are going to
4	deal, because here we are dealing with grand stand
5	philosophy, we are going to have two forests.
6	Baskerville testifies something similar
7	to it because he see the constraints and he's talking
8	about some of the conflicts which would appear, right.
9	Now, what I'm building on here, let's
10	deal with idea that we should have to avoid the superb
11	conflicts, what we have now, these steady battle
12	between the foresters and companies and government and
13	communities, what are we doing to our forest. Let's
14	decide for a while that we are going to share these
15	things reasonably and we going to establish in order to
16	feed the mills, hundred mills for the sawlogs, that we
17	going to consider some other aspects of it and leave
18	the others.
19	MR. MARTEL: Okay.
20	MADAM CHAIR: Thank you, Mr. Marek.
21	Mr. Freidin?
22	MR. FREIDIN: Q. Shall we move on to the
23	silvicultural standards on page 2 in relation to black
24	spruce, please.
25	A. You are talking about black spruce

1	guidelines?
2	Q. No, no, the Forests for Tomorrow
3	terms and conditions that you had a hand in preparing.
4	A. Oh, the same thing, yeah.
5	Q. And which you endorsed.
6	A. Yes.
7	Q. When you talk about black spruce
8	working group, I assume when you talk about working
9	group again, like yesterday, that means working group
10	as discussed as dealt with in the Forest Resources
11	Inventory?
12	A. In Forest Resource Inventory. Forest
13	classification Sb so much and then go poplar and so on,
14	in other words, the spruce working group.
15	Q. Okay. Thank you. Now, if you look
16	under subparagraph (a) and I'm going to spend some time
17	on this, we have four pararaphs.
18	A. Yes.
19	Q. In the first paragraph in the first
20 .	few lines you talk about mature in the first line,
21	mature black spruce stands. I emphasize the word
22	stands. See the very first line in the first
23	paragraph?
24	A. Spruce stands, correct.
25	Q. In the second paragraph you talk

about black spruce sites, and I emphasize the word 1 sites. 2 A. Yes. 3 4 Q. In the fourth paragraph you talk about black spruce--5 Stands. 6 Α. 7 Types, and I emphasize the word Q. 8 types. 9 A. Yes, yes, yes, yes. Is there a difference and, if so, 10 Q. 11 what are they? 12 A. What you mean? You are talking about 13 four different pararaphs in four different --14 No. It's not the meaning of the 15 whole paragraph. You talk about, in mature black 16 spruce stands in the first paragraph you should do 17 certain things. 18 A. Yes. 19 In the second paragraph you say on 20 black spruce sites classified as something you should 21 do something. 22 Α. Yes. 23 And then in four you say in black 24 spruce types you should do something.

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A. Okay.

25

1	Q. And I wonder whether there is a
2	difference between those concepts?
3	A. Okay. Sir, let's call it spruce
4	biome, spruce biome which represent not only the total
5	biome of black spruce, of spruce ecosystem.
6	Q. What is the relationship of spruce
7	biomes to black spruce stands which we understand and
8	can see identified on an FRI map?
9	A. Some call it black spruce stands,
LO	some call it ecologists call it spruce biome or
11	Q. All right. Could I change the words
12	in the second paragraph to say on black
13	A. Spruce.
1.4	Qspruce stands classified as such
15	and such. Would that be okay?
16	A. I didn't get you on this, sir.
17	Q. If I change the wording in the second
1.8	paragraph to say in black spruce stands, or on black
19	spruce stands classified as unstable, fragile, et
20	cetera, would that have the same meaning as where it
21	says on black spruce sites?
22	A. Black spruce sites, black spruce
23	stands, synonymous.
24	Q. Synonymous. And if I go down to
25	number 4, it says in black spruce types, if I said in

black spruce stands below 10 hectares, or with an area 1 less than 10 hectares --2 Synonymous again. 3 A. Synonymous again. 4 Q. A. That's right. 5 Thank you very much. 6 0. 7 But it means the different part of the biome or different part of the ecosystem, but they 8 altogether are identified as holistic as a system. 9 10 The words are -- when you say the 0. 11 words are synonmous, they mean --12 The words are not synonymous, but 13 they have a meaning, if I may -- here we are in English 14 I suppose, again, sir. 15 0. Yes. 16 Α. Whooo. 17 MADAM CHAIR: Mr. Marek, I don't think 18 this is a matter that is going to be any more helpful 19 for the Board than what we have so far. 20 If you're concerned about terms and 21 conditions and wording, then do it outside the hearing. 22 MR. FREIDIN: I agree with this issue 23 here. 24 Q. Mr. Marek, in the first paragraph of 25 2.1(a) you refer to distinct forest vegetation and soil

1	conditions		
2		Α.	Right.
3		Q.	should be used.
4		Α.	Yes.
5		Q.	Could you show me, using the
6	northwest FEC	, ho	w you go about doing it?
7		Α.	Well, it's very clearly specified in
8	FEC.		
9		Q.	Could you show me?
.0		A.	Oh, well there is 14 groups or 15
.1	sir, we dealt	wit	h that before.
.2		MAD	AM CHAIR: Is this the FEC or the
.3	interpretation	n?	
.4		MR.	FREIDIN: I don't know.
.5		Q.	You say in the
.6		A.	Very shallow soil over bedrock OG 1
.7	and so on and	so	on. There is 14 groups in the forest
.8	ecosystem cla	ssif	ication, Clay Belt, there is more of
.9	them in the n	orth	western Ontario.
20		Q.	All right. Let's use I just want
21	to know how o	r wh	ich distinct forest vegetation and
22	soil conditio	ns y	ou are referring to, because if
23	someone is su	ppos	ed to do eventually what it says here
24	I want to mak	e su	re that the people know what it is
25	that you are	sayi	ng they are to do?

1		Α.	Oh, well
2 .		Q.	All right.
3		Α.	Well, I got both of them.
4		Q.	Which one are you looking at?
5		A.	Doesn't make any difference, sir, it
6	just what you	are	trying to
7		MADA	AM CHAIR: Which page are you on, Mr.
8	Marek?		
9		THE	WITNESS: Well, okay. Page 20 in
10	field guide fo	ores	t ecosystem classification, the dark
11	blue book.		
12		MR.	FREIDIN: Q. Is that the
13	northwestern (Onta	rio one?
14		Α.	Site region 3E. No, it's not that
15	one.		
16		Q.	Can we use the northwestern one
17	because that's	s the	e one everyone has a copy of.
1.8		A.	Okay. This grouping which deals with
19	black spruce,	and	that is what I suppose we are after
20	here, so what	we e	going to do with that, sir, what do
21	you want me to	o ela	aborate on?
22		Q.	Let me see if I can shorten this, Mr.
23	Marek.		
24		Α.	Beg your pardon?
25		0	Let me see if I can shorten this

1	A. Yes.
2	Q. In the FEC guide, I'm looking at
3	exhibit
4	MADAM CHAIR: 1532.
5	MR. FREIDIN: 1532.
6	MADAM CHAIR: A.
7	MR. FREIDIN: Yes. If you go to page 63
8	which is at the third tab.
9	Q. Page 63, jack pine, black spruce,
10	blueberry, lichen, V-30 in the top right-hand corner.
11	A. Yes, I have it here.
12	Q. Is that a forest vegetation?
13	A. I am dealing with?
14	Q. That you are dealing with and
15	referring to in (a)?
16	A. No, I am not, because I am not
17	sir, I am dealing with black spruce mostly.
18	Q. All right.
19	A. Turn the page, 64, if you don't mind.
20	Q. Yes.
21	A. Black spruce, jack pine, that's much
22	better, that's a black spruce working group or should
23	be, jack pine, black spruce. Here is the problem with
24	black spruce feathermoss, that's a typical one I was
25	talking here about.

1	Q. les, that would be one.
2	A. That would be one. So that's on page
3	66. Okay, now what is
4	Q. If this was imposed as a term or
5	condition, which V types then are you saying would
6	qualify as being black spruce stands with the
7	appropriate distinct forest vegetation and soil
8	conditions such that this term and condition would
9	apply?
.0	A. Oh, there is several of them. There
.1	is a black spruce feathermoss group, there is a V-34
. 2	black spruce Labrador tea, there is a black spruce
.3	speckled alder, there is black spruce bunch berry,
4	black spruce eracaceous shrubs, black spruce
1.5	leatherweed.
6	Q. To shorten this, could you undertake,
17	Mr. Marek, to identify
18	A. Several.
19	Q the distinct forest vegetation and
20	soil conditions, including the various degrees of jack
21	pine referred to in each of the forest ecosystem
22	classification systems which would qualify under this
23	paragrah?
24	MS. SWENARCHUK: Just a minute. Mr.
25	Freidin, you are going to have can you kindly write

1	out that question. It's not the sort of thing that car
2	be done quickly off the top of one's head.
3	If you're asking for an undertaking
4	presumably a response to come back, I don't know when,
5	Monday, please write out the question.
6	MR. FREIDIN: All right, that's no
7	problem, I'll write it out and provide it to you later
8	MADAM CHAIR: All right. Mr. Marek, are
9	there any mature black spruce stands that you're not
10	prescribing strip cutting, patch cutting or block
11	cutting for?
12	I know you're talking about the distinct
13	forest vegetation and soil conditions, but are there
14	any mature black spruce stands that don't fall into
15	these categories?
16	THE WITNESS: This is very well
17	expressed. These are all mature stands which will be
18	harvested and my prescription, as stated here, the
19	guidelines apply to all of them.
20	MR. FREIDIN: Madam Chair, I still will
21	be asking for the undertaking.
22	MADAM CHAIR: I understand that, Mr.
23	Freidin.
24	THE WITNESS: Okay.
25	MR. FREIDIN: Q. Can we go down in that

first paragraph where you make reference to -- six or 1 2 seven lines where you say: "Harvesting shall be by strip cutting, 3 4 patch cutting or block cutting in regular or irregular shapes." 5 What page are you talking about? 6 Α. 7 Same paragraph, the first paragraph--Q. 2.1 on page 2? 8 A. 9 --under black spruce working group. Q. 10 Black spruce working group. Correct, 11 yeah. 12 Q. You notice in the middle of the very first paragraph under black spruce working group you 13 14 indicate that you can have strips, patches or blocks in regular or irregular shapes. Do you see that, there's 15 16 a reference to irregular shapes? 17 The width of opening should not 18 exceed twice the height of the tree. 19 MR. MARTEL: No, you're on the wrong -- I 20 think you're on the wrong page. 21 MR. FREIDIN: On page 2. 22 MR. MARTEL: Page 2. 23 Yeah, I have page 2 here. THE WITNESS: 24 MR. FREIDIN: All right. 25 MR. MARTEL: The sentence above it.

1	THE WITNESS: Okay, I see that now.
2	Okay, sir:
3	"Harvesting shall be by strip cutting,
4	patch cutting or block cutting in regular
5	or irregular shapes." Correct.
6	MR. FREIDIN: Q. And can you just
7	explain to me the reason that you provided for the
8	creation of irregular shapes?
9	A. Due to the geology of the site, due
10	to the site patterns and in condition of such a site.
11	Q. Thank you.
12	A. Main this is a main reason. There
13	are other reasons beside which I don't want to get
14	into.
15	Q. It states here in this same paragraph
16	that the width of openings should not exceed twice the
17	height of the trees.
18	A. That is correct.
19	Q. Could we go to the Jeglum article,
20	the 1982 article which was Exhibit 1585.
21	A. Jeglum. Yes. Which article are you
22	talking about, the first one '82 or the '84?
23	Q. The '82.
24	A. '82, okay.
25	MADAM CHAIR: Is that in a source book.

Mr. Freidin. Or was it a separate exhibit? 1 MR. FREIDIN: No, no, this is one of the 2 exhibits that I filed. 3 THE WITNESS: Here, Madam, here. 4 MADAM CHAIR: Thank you, Mr. Marek. 5 MR. MARTEL: Have you got a number for 6 that, Mr. Freidin? 7 8 MR. FREIDIN: 1585. Q. Okay. Do you have that document? 9 A. Yes, I have article here in front of 10 11 me. 12 Q. Can we go to the abstract. 13 Abstract. Yes, abstract, yeah. 14 Q. And the conclusion reached based on 15 this study was that there were no significant 16 differences in black spruce regeneration among strips 20, 40 and 80 metres wide. Do you agree that that was 17 18 the conclusion reached in this study? 19 A. Yes, yes, I'm aware of it, sir. 20 How tall is a mature black spruce, a Q. 21 good mature black spruce? 22 A. Good mature black spruce can go up to 23 75, 80 feet, site class X. 24 Q. All right. If it's 80 feet and you 25 multiply that by two you get 160 feet; correct?

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Δ	Vac
Ω.	Yes

Q. Jeglum indicates that there is no significant difference in the black spruce regeneration even if the strip is 80 metres wide, and 80 metres is about 275 feet.

Why have you made a rule that you can't exceed 160 feet when this study on your strip cuts indicated that you get no significant difference in the regeneration if you go up to 275 -- pardon me, 250 feet?

A. Whatever it may be, I see the point. I recognize and qualify and agree with Mr. Jeglum's statement here. On the other hand, the sites or the research which was done in this area show me very clearly that depending on site preparation, depending on, matter of fact site condition, and perhaps damage done to some of these sites by site preparation as it was done in this case here, play very important part.

This site preparation in all these strips were done very — the equipment which I consider very primitive in 70s, we were not able to provide equipment as we have available now, and I think Mr. Jeglum himself realize, and we discuss it very frequently, the distances and the width of the strips where you can get regeneration of black spruce as quick as possible, as

- quick as possible and as stocked as possible, or
- 2 maximum stocking in this case.
- Q. But if one of your concerns was that
 the site preparation was primitive back then, I would
 assume that if it's less primitive now--
- A. Yes.
- Q. --that is all the more reason that
 you should be allowed to go 80 metres. I mean, if you
 could get good regeneration with poor site preparation
 with 80-metre strips, then surely with improvements
 that have been made to date you should be able to get
 good regeneration in 80-metre strips now?
- 13 A. Possibly, possibly. Again, depending on the site, depend on many. The problem I had with 14 15 this wide 80-metre regeneration or succession of or 16 failure of regeneration was that many sites do not 17 qualify; in other words, the sites are of such a nature 18 that from my farther experiments and following up these 19 same experiments what Mr. Jeglum did, that's quite 20 long time ago as you know, convinced me that we should 21 go narrower; in other words, the width of the strip 22 should be minimized in order to get the benefits out of 23 the strip cutting for growth of the second growth black 24 spruce.
- 25 Mr. Jeglum, as you know Mr. Freidin,

1	experiment with growth of black spruce in these strips
2	as compared to the open clearcuts. You are aware of
3	it?
4	Q. I am aware of it.
5	A. Okay, good. Then let me say to you
6	that it's clear that black spruce grew much better -
7	well, much better - better in the strip cuts than in
8	the open clearcuts; correct?
9	Q. If that's your evidence.
. 0	A. It's evidence which is
.1	Q. I'm not here to agree or disagree
.2	with you, but okay.
.3	A. What Mr. Jeglum state in the same
. 4	paper, sir. You asked me to read that paper, so I read
.5	it again.
.6	Q. All right. Let's see if we can keep
.7	on the issue. The issue is the width of the strips.
.8	You've told me that on some strips 80 is too wide?
.9	A. That's correct.
20	Q. But on some strips 80 is okay?
21	A. Providing that, providing that.
22	Q. Providing that what? Providing what?
23	A. Providing that the site preparation
24	is uniform, providing that you have better concept of
25	survival and better concept for documentation on growth

1 and so on. Q. They got good regeneration on strips 2 which were 80? 3 Which does not mean anything, sir. 4 It means that on some strip cuts you 5 0. can get good regeneration when it's 80 metres wide? 6 7 But what's -- okay. Α. 0. All right. Taking into account all 8 the activities which take place, your terms and 9 conditions, Forests for Tomorrow's terms and conditions 10 do not give, do not permit a strip to be--11 12 No more than two heights. A. More than 80 metres? 13 Q. 14 Correct. A. 15 Q. And, therefore, even on a site where 16 it is appropriate to go 80 metres, these terms and 17 conditions do not permit it; is that not correct, sir? 18 Yes. Α. 19 Okay, good. Q. 20 There is a reason for it, sir. Α. 21 All right. And what is the reason 0. 22 for it? 23 Α. The reason is, it's the same report 24 is telling you, that considering environment, and many 25 of these strips may vary from narrow to wide, the

experimentation and the measurements we have done is

that many instances the shorter, the shorter of the

original uncut stand provide better condition than

wider strips which may be up to hundred or 200 metres,

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in case 80 metres.

- Therefore, may I suggest to you, sir,

 that if you have a wide strip, regeneration here in the

 narrower concept will be better growing than here at

 the 80-metre, and I want to have immediate or as soon

 as possible results where the spruce get the whole

 benefits of this protective...
- Q. All right. Are you suggesting that
 we should not rely on the results of the taxonomist Dr.

 Jeglum in terms of his conclusions?
 - A. No, he didn't measure these results of growth. This is strictly regeneration. This is results which state there is so many seedlings in the year one, two, three, four, but he doesn't really say, and he say later on when he experimented with the growth in these things, that the trees here are growing better in narrow strip than in the wider strip or in open clearcut.
- Q. All right. We may have to come back to this.
- 25 A. I wish you do.

Q. Mr. Marek, the last sentence talks 1 about when the final cut can occur. 2 3 Correct. And it indicates that the -- I'm 4 0. 5 sorry, before we get into that, you made the comment in your evidence that the loss of productive land to roads 6 7 and landings was approximately 10 per cent. 8 Oh God. I have made statement which 9 was week ago by Premier counsel who said I shouldn't 10 bring it as evidence because that was 10 per cent on 11 Kimberly-Clark which we have, as you probably r 12 emember, discussed and immediately -- That's where this 13 10 per cent came in. I hope, if my memory served me 14 right, you objected. 15 Q. I take it that the loss of 10 per 16 cent --17 MADAM CHAIR: Excuse me, I don't know 18 what the reference is to--19 MS. CRONK: I don't either. 20 MADAM CHAIR: -- 10 per cent for 21 Kimberly-Clark. 22 THE WITNESS: I have stated in my 23 testimony, Madam Chair, that we have experimented in 24 Geraldton District. 25 MS. CRONK: I recall. Sorry to

1	interrupt. There was an objection, as I understood, it
2	was during the evidence-in-chief, Mr. Marek started to
3	refer to something that he described as a landing
4	study.
5	THE WITNESS: Correct.
6	MS. CRONK: That we had not heard of and
7	not received production of, I objected. I understood
8	the objection was sustained and no further evidence was
9	given on that issue.
10	MADAM CHAIR: All right, thank you.
11	MR. FREIDIN: Q. Let's forget the roads
12	and landings. The loss of 10 per cent of the
13	productive land base and the volume that that would in
14	fact represent is a matter of concern, would be a
15	matter of concern to you regardless of the cause?
16	A. Very much so.
17	Q. And as I understand your evidence, 5
18	per cent would be also the same, you would be concerned
19	about that as well?
20	A. I am concerned about any removal of
21	productive land.
22	Q. Or loss of
23	A. Or loss to whatever.
24	Q. Or loss of volume if in fact we are

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talking about mill requirements, loss of volume from

1	stands?
2	A. Yes, yes. Eventually winds up with
3	the production, yes.
4	Q. Thank you. Now, you gave some
5	evidence about minimizing blowdown or strips pardon
6	me, minimizing the amount of blowdown in a strip cut
7	through certain means so that you wouldn't get blowdown
8	equal to what you might get in a clearcut.
9	A. No, no, no.
. 0	Q. All right. I'm sorry, poorly
.1	phrased. What are the mechanisms that you would use
. 2	to I'm trying to save some time.
.3	When you said that you were going to
4	reduce the amount of blowdown through certain
.5	mechanisms, were you talking about buffering
16	A. Buffering zone.
17	Q and the orientation of strips?
18	A. Orientation of strips, of the
L 9	protection of faces, strip faces; in other words,
20	protection against machinery which goes through the
21	strip.
22	Q. All right.
23	A. By extracting and so on.
24	Q. But in terms of blowdown from the
25	wind

1	A. Ye	es.
2	Q	-you do this through buffers and the
3	orientation of strip	ps?
4	A. Ye	es, that is only two out of probably
5	other.	
6	Q. A.	ll right. Let's just deal with
7	those two.	
8	A. Y	es.
9	Q. We	ould you turn to your source book
10	report by Fleming a	nd Crossfield.
11	Α. Υ	es,
12	Q. I	'm not sure which source book it is.
13	MS. S	WENARCHUK: One.
14	MR. F	REIDIN: One.
15	THE W	ITNESS: I have to look at Fleming
16	here. What source	book is it, Madam, 1 or 1?
17	MADAM	CHAIR: It's 1.
18	THE W	ITNESS: One. Yes, I got it.
19	MR. F	REIDIN: Q. Would you turn to page
20	No. 21, please t	urn to 19, first.
21	A. 1	9.
22	Q. S	ee where it starts the discussion
23	and the conclusions	on page 19?
24	. A. D	iscussion and conclusions, yes.
25 ·	Q. N	ow, turn over to page 21 which is

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_	part or that.
2	A. Yes.
3	Q. Am I correct, sir, that these were
4	strip cuts that you were responsible for preparing the
5	prescriptions for?
6	A. Yes.
7	Q. And would you agree with me that if
8	you look at page 21 in the last full paragraph on the
9	right-hand side of the page
10	A. Yes.
11	Qwhich says 'neither', would you
12	agree with me that Jeglum, based on the study of your
13	strip cuts and your prescriptions, concluded that
14	neither buffering of the open ends of the strip by
15	adjacent timber nor strip orientation had a consistent
16	effect on volume losses.
17	Do you agree that that was the conclusion
18	that they came to based on
19	A. I disagree with it.
20	Q. You don't agree that Mr. Jeglum has
21	reported accurately what in fact occurred on that site?
22	A. As he saw it. As he saw it.
23	Q. As he saw it. And you saw it
24	differently, so you disagree with Dr. Jeglum on that
25	issue?

1	A. That is correct.
2	Q. Thank you. Let's deal with the issue
3	which is raised in the last sentence of your pardon
4	me, going back to Forests for Tomorrow.
5	A. Okay.
6	Q. Same paragraph, first paragraph, it
7	says at the end:
8	"Before the final cut occurs on these
9	areas, adjacent cut-over"
10	A. What page are you on, sir?
11	Q. Page 2, talking about black spruce.
12	Under black spruce, the first paragraph, the last
13	sentence of the first paragraph says:
14	"Before the final cut occurs on these
15	areas, adjacent cut-over areas must must
16	be producing viable seed."
17	Do you see that?
18	A. Yes.
19	MADAM CHAIR: What page are we on, Mr.
20	Freidin?
21	THE WITNESS: Page 2.
22	MR. FREIDIN: Page 2.
23	MADAM CHAIR: Thank you.
24	MR. FREIDIN: And if I just might have a
25	moment, I have misplaced something. Oh, here it is.

Q. I take it that the leave time that 1 you have provided for here; i.e. --2 Two years, three years. 3 A. 4 Q. No, no. It says: "Before the final cut occurs...", right, 5 "...on these areas, adjacent cut-over 6 7 areas must be producing viable seed." That's right. 8 Α. 9 Would you agree with me, Mr. Marek, Q. that black spruce generally begins to bear cones at age 10 10 to 15 years? 11 12 A. Correct. 13 Q. And would you agree when it starts to bear cones you don't get a lot in the first years but 14 it increases as the trees get beyond the 10 or 15 15 16 vears? 17 A. As the tree build up bigger crowns and start maturing, yes, it builds up more seed 18 19 sources, the cones and, of course, seed source. 20 Q. How high is a black spruce on a good site if it's 10 to 15 years old? 21 22 Before it's 10, 15 years old, look at 23 Plonski's yield tables, it start with to age 20 and --24 Q. What about your sites? Can you just 25 tell me on your sites how tall were the black spruce

1	when they were 10 to 15 years old?
2	A. Well, differs on sites.
3	Q. Give me a good site?
4	A. Well, good site. 10, 15 year old
5	should be what, 16 feet.
6	Q. Okay.
7	A. Just a guess, sir.
8	Q. Well now, if you cut if you can't
9	cut the leave strip then; i.e., the final cut cannot
10	occur until the adjacent cut-over must be producing
11	viable seed.
12	A. Yes.
13	Q. Based on what you've just told me,
14	that means that you can't cut the final coupe for at
15	least 10 or 15 years after the adjacent coupe was cut;
16	am I correct?
17	A. Would you state again, what?
18	Q. All right.
19	A. Because I
20	Q. Your last sentence
21	A. Yes.
22	Qsays you can't cut the final
23	make the final cut until the adjacent cut-over
24	A. Produce seed.
25	Qis producing viable seed. You have

1	told me it doesn't produce viable seed for 10 or 15
2	years after it was harvested and even then it's not a
3	lot in the first few years, and I'm saying that the
4	logical conclusion one comes to, based on your wording,
5	is that when you're doing strip cutting you can't cut
6	the last cut until at least 10 or 15 years, you have to
7	leave that last thing standing there for 10 or 15 years
8	before you can go back and cut it because if you don't
9	wait 10 or 15 years the adjacent cut-over is not
LO	producing viable seed.
11	A. I just cannot see your reasoning
12	there. I'm sorry, perhaps somebody can interpret it
13	for me.
1.4	Q. Look at the words. I just want you
15	to please, would you just pick up the document, the
16	Forests for Tomorrow terms and conditions.
17	A. Yes.
18	Q. Would you read the words slowly:
19	"Before the final cut occurs, the
20	adjacent cut-over", are you talking
21	about the adjacent strip there?
22	A. I'm talking about adjacent strip.
23	Q. All right.
24	A. I am not talking about this is
25	what I cannot grasp, this is logic, sir. It is obvious

- to me that I am dealing with seed source and protection source which will provide the seeds and you are talking about young stands of 15 years. I'm sorry.
 - Q. Mr. Marek --

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A. Please, would you explain it to me in writing.

MS. SWENARCHUK: Wouldn't it just be

speeded up if the question was put to Mr. Marek to

explain the last line and how he envisions that

working, and then if Mr. Freidin thinks that the

wording doesn't comply with that vision, that's a

matter that can be dealt with surely outside of the

hearing room.

MR. FREIDIN: I thought the words were quite clear, and that's why I feel I should ask him. I have a problem with the obvious meaning of those words, Madam Chair, and I would like to explore the consequences of the obvious meaning of those words.

MADAM CHAIR: All right, Mr. Freidin, do
your diagram quickly. It's clear to the Board what Mr.
Freidin is trying to get at and, that is, he is saying
can you not take the final coupe until the area around
it, the cut-over area around it has reached cone
bearing age, which would be 10 or 15 years, and I think
Mr. Freidin's point is that if there is no other seed

source in the area, no other standing timber, do you 1 have to wait for the cut-over area surrounding the last 2 standing uncut strip? 3 4 THE WITNESS: Mr. Freidin, go ahead with your art there because I appreciate. 5 MR. FREIDIN: Q. All I'm saying, this is 6 7 your--8 A. Strip cut. 9 Q. A box. 10 A. That's right. And the strips with the "x"s in them 11 Q. 12 are cut? 13 That's right, and here --A. 14 Q. The idea is--15 Standing timber. A. 16 Q. Is that this cut, when can you 17 harvest -- when can you harvest this one, the one where 18 I'm putting the No. 1 in? 19 That's right. A. 20 When do you harvest that? Q. 21 When you harvest it. No. 1 --A. 22 In terms of when you harvested --Q. 23 Well, this is harvested. A. 24 Q. Yes. 25 Α. Seed is coming into the -- seed

1	germinates here.
2	Q. Right.
3	A. Got to be 80 per cent stocked to
4	black spruce.
5	Q. No, No. 1 no, let's do it this
6	way. No. 1 was cut?
7	A. Oh, this was cut.
8	Q. On January the 1st, 1990.
9	A. Right.
10	Q. Okay?
11	A. Yes.
12	Q. Now, it is going to be regenerated
13	from strip which I've identified as 'A'. The seed
14	source will come from 'A' which is still standing?
15	A. Correct.
16	Q. And will regenerate
17	A. Yes, yes.
18	Qstrip No. 1.
19	A. Yes. Yes.
20	Q. Now, when you cut strip No. 'A'
21	A. 'A', correct.
22	Q. Where is the seed source coming from
23	to naturally regenerate it?
24	A. In alternate strip cutting in many
25	instances it come from the seeds on the ground which is

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already in the stands, in the humus or in the mosses. 1 There is advanced regeneration which should be 2 protected, and if this whole system failed, then of 3 course you have to somehow reforest this, you may 4 5 evengo planting. Mr. Marek 6 Q. 7 Α. Yeah. 8 Mr. Marek, In the areas you were 9 talking about where you've got black spruce--10 Α. Yeah. Q. -- and you were telling us that you go 11 12 in there and you harvest the black spruce and get rid 13 of the poplar, get rid of the balsam fir. 14 Α. Yes, yes. 15 Are you telling us that in the 16 majority of cases that strip No. 'A' will regenerate to 17 80 per cent stocking or more as a result of cones, 18 black spruce cones on the ground? Yes. It's right in Jeglum's report 19 Α. 20 which states the number of trees is the advanced 21 regeneration, advanced regeneration under the canopy of 22 these uncut stands. Please follow the report. 23 Q. Will you show me in the report, and 24 maybe that is what you should do over the lunch hour. 25 A. You get over tomorrow.

1	Q. Show me the report where it says
2	that.
3	A. Yes you gave me that to read, you
4	read it just as well. Sir, Jeglum
5	Q. Obviously I didn't read it as well.
6	A. Obviously you didn't. Sir, the
7	advanced number of germinants, advanced growth in these
8	uncut stands, there is large number of seedlings which
9	will pop out, and No. 3 is, of course, that you have
10	also seed sources from the buffer zones, you have seed
11	coming in, and in many cases these stands, which are
12	the second cut, are well stocked, according to Jeglum
13	up to 60 per cent after so many years. I don't know if
14	that is statement here.
15	Q. That report, sir, does not deal with
16	the leave strip, it specifically says we have not dealt
17	with the problem of regenerating the leave strip, and
18	that is an issue which must be dealt with and
19	addressed. I suggest to you
20	A. Then you read your report first, sir,
21	because Jeglum stated in this report the number of
22	seedlings of advanced regeneration in the stands which
23	are uncut.
24	MADAM CHAIR: Is it your evidence then,
25	Mr. Marek, that you don't have to wait 10 to 15 years

1	before harvesting the leave strip because of advanced
2	regeneration and seeds that are already in the leave
3	cuts?

THE WITNESS: Madam, this is well documented in many reports, that. Matter of fact in Clay Belt in many areas you don't even have to have seed source because seed is already in these mosses.

MR. FREIDIN: Q. I'm talking about your area and I would ask you, sir, to take me to the portion of the 1982 Jeglum report and point to me where it indicates that the regeneration in the leave strip after it is cut would provide adequate stocking per your definition through advanced growth, or the seeds from buffer strips. I want you to do that for me, please?

A. I will examine it again and bring to your attention where the count was made in standing timber presenting number of seedlings and advanced growth present there.

Q. I suppose the question I would ask, if there is sufficient advanced growth to in fact provide adequate regeneration in the leave strip, when you do that there was sufficient advanced growth in the first cut, so why wouldn't you just clearcut the whole thing and let the whole place regenerate through

1	advanced growth, Mr. Marek?
2	A. Sir, you are making mockery out of
3	forestry, I'm sorry to say this. Forestry does not
4	work this way and I'm sorry to hear it.
5	Sir, in some area indeed you are right,
6	but overall you are so basically wrong that you go back
7	to the basic forestry books which will tell you exactly
8	why, why is not done and why is done successfully and
9	then we can talk about it.
10	Sir, why we are doing strip cutting. You
11	completely misunderstand and misinterpret the basic
12	rule of forestry which states, and I go back to what I
13	had written, and please you study it carefully, you
14	study it very carefully what's written here. I like to
15	present that as a document of my presentation.
16	MR. FREIDIN: All right. Maybe over the
17	lunch hour, Madam Chair, I will read that and Mr. Marek
18	can read the report and show me
19	THE WITNESS: Oh, I will not.
20	MR. FREIDIN: And show me the section

THE WITNESS: Sir, I will not do it over lunch because I have been up with your statement reading at night and you don't remember it, and you try to convince me to read it. Now, I go for walk and we

that he's referring to.

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1	can meet on Monday or Tuesday discuss it.
2	MR. FREIDIN: Madam Chair
3	MADAM CHAIR: Mr. Marek, is there one
4	sentence in the Jeglum report that you recall?
5	THE WITNESS: Yes, I do very well,
6	because I read it again, again, again.
7	MADAM CHAIR: Are you able to point the
8	Board to where that sentence is without spending any
9	time over the lunch hour looking at the document again?
1.0	THE WITNESS: Madam, I will present that
11	at my convenience, when I feel I like to study again.
L2	I will not do it during, because I put up
13	with this for last three weeks, do it over lunch hour,
1.4	do it this, and he throw it at me ten o'clock in the
15	evening I have to look at it.
16	Madam, there are certain fair plays on
17	the part of fellow who stand there for last three
18	weeks, so please give me a break.
19	MADAM CHAIR: Mr. Marek, the Board is
20	certainly sympathetic to the position of the witnesses.
21	We have great respect for the amount of effort that
22	goes into being a witness and an appreciation of how
23	aggravating the whole process is.
24	Our job is to get the information in
25	front of us quickly, and we put ourselves outside of

- 1 what goes on between the parties, among the parties, and what goes on between counsel and a witness. 2 I think we've reached a little impasse 3 here, Mr. Freidin. Mr. Marek, I don't want you to 4 5 characterize him as being completely uncooperative on this matter. I think what we're going to do is ask Mr. 6 Marek to produce the specific reference on Monday. 7 8 THE WITNESS: Thank you. MADAM CHAIR: And you will return to that 9 point on Monday. If you could guarantee that you would 10 11 be finished today with your cross-examination, Mr. Freidin--12 13 MR. FREIDIN: I cannot. 14 MADAM CHAIR: --we would urge Mr. Marek to do this work very quickly, but you are not going to 15 be finished today? 16 17 MR. FREIDIN: No. MADAM CHAIR: Then Mr. Marek will look 18 19 this up and present it on Monday. MR. FREIDIN: Thank you, that's 20 sufficient. All I want to do is have the reference. 21 Thank you very much, Madam Chair. 22
- MADAM CHAIR: Thank you. And we will be back -- we will take our lunch break now. Enjoy your walk, Mr. Marek.

THE WITNESS: Thank you. 1 MADAM CHAIR: We will be back in an hour 2 and a half. 3 MS. SWENARCHUK: Come back at a quarter 4 to two then, Madam Chair? 5 MADAM CHAIR: Yes. 6 7 ---Luncheon recess taken at 12:15 p.m. ---On resuming at 1:45 p.m. 8 MADAM CHAIR: Please be seated. 9 10 How was your walk, Mr. Marek? MR. MARTEL: Madam Chair, I didn't go for 11 12 a walk because I had to check out of hotel and that's the main reason that I couldn't -- I thought I wouldn't 13 14 comply with the request, but I did it the results for 15 benefits of my friend there are here, instead of discussing it, Madam. 16 17 MADAM CHAIR: Thank you very much. 18 MR. FREIDIN: All right. Perhaps we 19 could begin then by marking that piece of paper as the 20 next exhibit. 21 MADAM CHAIR: That will be Exhibit 1587. 22 Thank you, Mr. Marek. All right. Mr. Marek -- let's 23 describe the Exhibit 1587 first, Ms. Swenarchuk. 24 THE WITNESS: Madam Chair, it deals with 25 request or discussion I had with my friend there before

1	noon about the stocking in uncut strips and Mr. Jeglum
2	in his report which was given to me to read, and I
3	think that should be read by all of our friend too.
4	States that:
5	"Stocking of black spruce seedlings in
6	the pre-cut assessment", pre-cut means
7	prior cutting in the stands which are uncut here,
8	"was significantly different in tree
9	strips with blocks but similar in the two
10	year"
11	MR. FREIDIN: Q. I'm sorry, where are
12	you reading, what page?
13	A. Page 6 of your
14	Q. Of the 1982 study?
15	A. Yeah. And it states:
16	"Stocking drop from"
17	Q. I'm sorry, just
18	A. "from 57 per cent overall in the
19	pre-cut condition to 49 per cent in the
20	first year after cutting."
21	So which means that the stocking in
22	pre-cut strips or in uncut strip was 57 per cent. That
23	should answer my friend's enquiry and be part of my
24	testimony.
25	O The 57 per cent being referred to is

1

stocking in the --1 Uncut strips. 2 Α. In the uncut strip? 0. 3 That's right, because he said Α. 4 pre-cut; in other words, these strips are identical to 5 6 pre-cut strips. All right. Let's turn to Table 5, 7 8 please, at page 12. 9 A. Correct. Mr. Marek, this table is entitled --10 11 MR. FREIDIN: This is the 1982 report, this is Exhibit 1585 at page 12, not in the source 12 13 book, it was one of the documents I filed. 14 MADAM CHAIR: Yes. And this is page --15 MR. FREIDIN: Yes. 16 MADAM CHAIR: Page 12 is the Table 5. 17 MR. FREIDIN: Just for your information, 18 Madam Chair, in case you didn't have the document in 19 front of you when Mr. Marek was giving the evidence, he 20 was quoting from page 6 of that document. 21 MADAM CHAIR: Yes. 22 MR. FREIDIN: If you go to page 6 of the 23 document in the right-hand column in the second 24 paragraph under the heading results: 25 "Stocking dropped from 57 per cent..." et

1	cetera.
2	MADAM CHAIR: Yes.
3	MR. FREIDIN: That was the reference Mr.
4	Marek made and Mr. Marek is indicating that was a
5	stocking which was taken in the uncut
6	THE WITNESS: Correct.
7	MR. FREIDIN:strip or putting it
8	another way, the stocking which was in fact in the
9	leave strip; right, same thing?
. 0	THE WITNESS: It may and may not be.
.1	Again
. 2	MR. FREIDIN: Q. All right. In the
.3	uncut strip. It was the stocking in the uncut strip?
. 4	A. Okay.
.5	Q. Now, Table 5, if we look at the
. 6	left-hand column and we look under the list of species
.7	there, it says black spruce; do you see that?
. 8	A. Yes.
.9	Q. And it has in the second column,
20	vertical column pre-harvest 1974, and it indicates a
21	stocking of 57 per cent?
22	A. Correct.
23	Q. Now, Mr. Marek, this table, if we
24	look at the title it's called the Effects of Leave Time
25	on Regeneration of the Five Main Species, and it says:

1	"Data are for all seedlings less than 2.5
2	centimetres dbh and individual scarified
3	strips combined."
4	Am I correct, sir, that really what that
5	means is that the stocking which is being referred to
6	is stocking to advanced growth, these are the younger
7	trees in the stand, not the trees that would be
8	harvested?
9	A. Correct.
.0	Q. Now, if you have got stocking in the
11	uncut strip of 54 per cent pardon me, 57 per cent
12	A. 57.
13	Qin the form of advanced growth,
L 4	would you agree with me that when you cut that strip
15	that it is highly likely that you will damage some of
16	that advanced growth?
17	A. Exactly.
1.8	Q. How would that advanced growth of 57
19	per cent reduced by the damage which would occur.
20	through logging the uncut strip, result in stocking of
21	80 per cent which you indicated is what is required?
22	A. To the influence on new seed source
23	in the cut-over area, in the clearcut strips. It's a
24	combination of stocking, combination of advanced
25	stocking, combination of seeding - that's why we do

- strip cutting, sir, that's why I disagree with you when
 you say you clear cut it, you know, that last statement
 that you made walking to your place, you made a very
 improper statement.
 - You concluded that if you clearcut it that you might as well clearcut it and plant it, or something like, and this is why we do strip cutting in order to enrich or supplement the regeneration in the clearcut strip, Madam.
- Q. And, Mr. Marek, if the basis on which
 the last strip will regenerate to your 80 per cent
 after cutting is a combination of advanced growth which
 is in there of 57 per cent less something—
- 14 A. Yes.

6

7

8

9

- Q. --plus what will be contributed by

 seed from the adjacent coupe --
- 17 A. No, that coupe is gone. If you talking --
- Q. Where is the seed going to come from
 to increase the stocking from 57 per cent less
 something from advanced growth to 80 per cent which you
 say is a mandatory requirement?
- A. The advantage of strip cutting is
 that it minimize impact or can shelter the regeneration
 that is eventually established in the clearcut strip.

1	The advantage of strip cutting is that
2	some of the seed which is buried can be germinated or
3	will germinate, not all, and the other one is that in
4	modified cutting or any small area clearcut management
5	you have remnants of seed source; in other words, the
6	original stand here and there distributed throughout
7	the area, because not everything is clearcut, and you
8	have quite an advantage of getting some seed source
9	from that, as I pointed out in my photograph, that way
.0	supplementing natural regeneration of these strips from
1	A to B and into C.
.2	Q. Would you agree with me that if you
.3	are using a two-coupe system and you've got 57 per cent
. 4	stocking of advanced growth in strip A
.5	A. Yes.
.6	Qon this exhibit
17	MR. FREIDIN: What number are we going to
.8	give this, Madam Chair?
19	MADAM CHAIR: Exhibit 1587.
20	MR. FREIDIN: Thank you.
21	MADAM CHAIR: And are we describing it
22	simply as a sentence from page 6 of the 1982 Jeglum
23	article?
24	MS. SWENARCHUK: No.
25	MADAM CHAIR: How do you want to describe

1	this, Ms. Swenarchuk?
2	MR. FREIDIN: Why don't we call it sketch
3	of strip cuts and stocking results prepared by me.
4	EXHIBIT NO. 1587: Sketch of strip cuts and stocking results prepared by Mr. Freidin.
5	
6	MR. FREIDIN: Q. Now, if you have got
7	something less than 57 per cent advanced growth in
8	strip A and you cut it, you have now told me that that
9	stocking can increase due to seeds in the ground
10	germinating?
11	A. Yeah.
12	Q. Would you agree with me that that
13	stocking could not increase as a result of seeds from
14	strip one?
15	A. That strip is gone.
16	Q. Right. So you can't get any seeding
17	contributed by the last by the first coupe until we
18	have passed 10 or 15 years plus from the date that
19	strip No. 1 was cut?
20	A. Hypothetical question.
21	Q. Why so hypothetical?
22	A. Hypothetical.
23	Q. Why?
24	A. Because, sir, in practice, in
25	practice, most of the seed trapping I have done,

1	trapping seed, you know, trapping seed is from seed
2	source someplace where it come from, trapping. I'm
3	trapping just like trapping marten or trapping
4	Q. All right. I think if you keep going
5	I might understand you.
6	A. Okay. When I trap, the experience
7	which was done with trapping of seed. Say you put seed
8	traps here, and you follow that seed trapping for
9	certain time
10	Q. This is like an experimental thing
11	where you're trapping seed?
12	A. In order to find out what input you
13	get into natural regeneration.
L 4	Q. I see.
1.5	A. In many occasion there has been
16	documented throughout this strip cutting experiment
1.7	that seed may come all the way from, some time it come
L8	mile, mile and a half away.
L9	Q. Sometimes. Would you agree with me,
20	sir, that the theory and the purpose of strip cutting
21	is, in the first cut strip to in fact get seeding from
22	the standing strip which is left?
23	A. Correct. But that has been said many

24

25

times here, Madam Chair.

Q. So are you now telling me that in the Farr & Associates Reporting, Inc.

1	last cut that we'll increase from 57 per cent stocking
2	due to advanced growth to 80 per cent stocking to black
3	spruce because of the additional contribution of seeds
4	in the ground and seeds blowing in
5	A. Right.
6	Qfrom stands removed from the strip
7	cut area?
8	A. Correct. And from possible seed
9	source left behind in the second coupe. Sometimes we
10	leave fringes, some time leave seed groups. This is
11	done frequently, so you have additional seed source.
12	In other words, we are talking about how
13	we going to reforest the remaining strips, and that has
14	been discussed here on many occasions. Should I go
15	into it again, Madam Chair?
16	MADAM CHAIR: No, we have heard that, Mr.
17	Freidin.
18	MR. FREIDIN: No.
19	MADAM CHAIR: Mr. Marek, is it the case
20	that the first coupe which benefits from having an
21	uncut strip
22	THE WITNESS: Correct.
23	MADAM CHAIR:beside it or on either
24	side of it, would you expect the first coupe to be
25	better stocked because it has

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1	THE WITNESS: Immediate.
2	MADAM CHAIR:immediate and close seed
3	source?
4	THE WITNESS: Correct.
5	MADAM CHAIR: You would expect it to have
6	higher stocking than the following coupe?
7	THE WITNESS: Correct.
8	MADAM CHAIR: Over a shorter period of
9	time?
.0	THE WITNESS: Well, again, this period
.1	may vary due to all kind of conditions I explained,
2	supply of seed, and condition of the site preparation
13	and so on.
14	But, Madam Chair, it's very important to
15	realize that in some cases we don't get hundred or 80
16	per cent stocking across the field, and I'm not
17	defending that, but the purpose of strip cutting is
18	that there is a protection for the natural regeneration
19	which is very important, and I wish again bring the
20	report which specify very clearly the protective aspect
21	for that natural regeneration which grows much better
22	than in open areas. That has been documented in the
23	same report, Madam.
2.4	MR. FREIDIN: Q. Now, you've testified
25	about this before. When you're talking about the

1	Ameliorative effect, the beneficial effect
2	A. Beneficial.
3	Qof strip cutting, you're talking,
4	as I understand it, about the benefits that you
5	perceive that the standing strip provides to the
6	establishment and regeneration of seedlings in the
7	first cut?
8	A. That is correct.
9	Q. That same ameliorating effect, of
.0	course, is not provided to the second cut of a
.1	two-coupe system because the standing timber which is
.2	adjacent to it is quite different than
.3	A. Trees removed.
4	Q. All right. So you agree? Do you
. 5	agree
.6	A. Yes. I said yes.
.7	Q. Yes. All right, thank you.
8	A. Yes, but
9	Q. Now, when you yes? I don't want
20	to cut you off.
21	A. But what is important that that
22	regeneration of natural region from the same stands
23	which were there before. That's a very important
24 .	aspect of modified cutting also.
5	O Ves I understand that

1	A. Okay.
2	Q. Now, in the cut here which we have
3	identified as cut A, the one which would be cut last in
4	the two-coupe system
5	A. Yes.
6	Qwhere we have 57 per cent stocking
7	to black spruce, am I not correct that this stand also
8	has, if we look at Table No. 5, stocking to balsam fir
9	of 70 per cent?
10	A. Yes.
11	Q. How are you going to harvest in that
12	second coupe, Mr. Marek, in order to minimize or
13	prevent damage to the advanced black spruce seedlings?
14	A. Well, first of all, let me point out
15	that the balsam which is as advanced growth under
16	shorter condition will not last, majority will die
17	because balsam is a very tolerant species, when it
18	exposed to solar radiation will disappear, not all, but
19	most of them will be destroyed by shear exposure.
20	There is others things, there is other
21	species which you have here which are incidental and
22	they do actually not bother the black spruce
23	establishment, in many instances many of these species
24	are complimentary.

25

So you cannot say competition one way or

- the other, you have to identify specifically what kind 1 2 of competition or ingrowth. That is a term which I like to use, ingrowth of other species occur, which is 3 4 extremely, extremely important. 5 And in case you have a balsam -- pardon 6 me, poplar seed trees or leaving poplar standing here, 7 then you have a really problem with ingrowth of poplar. 8 So is that what you are... 9 No, I'm just concerned about -- if 10 one is concerned about balsam fir on these stands and 11 you've got stocking of 70 per cent in the stands--That's right, under the condition of 12 A. 13 pre-cut. After you cut it and expose it, balsam usually desiccate; in other words, balsam as a young 14 15 seedling cannot take exposure, it's got to be also protected, and that's the finesse of forestry, sir, 16 that is dynamic of forest which we understand so 17 18 poorly. 19 0. Mr. Marek--20 A. Yes.
- Q. --as I understand what you have just told me, you're saying that the second cut in a two-coupe system can be cut within two or three years of the first cut.
- 25 A. Whoa.

Well, first of all, we don't have to 1 Q. rely on -- to get the 80 per cent stocking that you say 2 you can achieve, you don't have to rely on seed from 3 the adjacent coupe? 4 Yes, we do rely on. 5 A. No, no, no. In strip No. A which is 6 7 the second cut. 8 Where the 57 per cent was present A. before cutting, advanced growth. 9 10 Q. All right. 11 A. Okay. 12 When are you proposing that it would Q. 13 be acceptable to cut? 14 A. To remove? 15 No, to remove --Q. 16 Exactly. A. 17 0. Or to harvest strip A--18 A. Yes. 19 --in relation to the time when you Q. 20 cut strip 1? 21 In other words, I read you what you 22 are trying to say, and I assure you that it can be done 23 by simply saying, when you going to cut the second 24 strips. 25 Q. Yes, okay.

1		Α.	When you going to cut the second
2	strip. Why do	on't	you say that, when you going to cut
3	second strip?		
4		Q.	When are you going to cut it?
5		A.	Now, I understand.
6		Q.	In relation to the time you cut the
7	first one?		
8		Α.	Yeah, that's right, so this is done,
9	we have cut is	t.	
. 0		Q.	Tell me. Can you answer me?
.1		A.	Yes, I will. That's the purpose of
.2	your question	ing o	of course. Sir, this is up to the
.3	forester to f	ulfi	ll his prescription, when that
. 4	stocking in the	hese	second strips reach what the forester
.5	feel he have	200 ON	
.6		Q.	In the second strip or the first
.7	strip?		
.8		A.	Sir, we are in the second strip now.
.9		Q.	All right. When the stocking in the
20	second strip,	yes	?
21		Α.	Reach certain stocking with
22	stocking which	h co	uld ensure earliest crown closure as
23	possible d	id y	ou read this, sir, during the lunch as
24	I did my one,	so	I don't have to repeat this, obviously
05	it's hara		

1	The aim of this to achieve crown closure
2	as soon as possible with many seedlings in order to
3	bring the productivity up to the level which optimize
4	or in some cases maximize the production for the
5	primary species establishment.
6	Q. Okay. Now, you've just told me that
7	you can cut the second strip. When you're trying to
8	determine when you can cut the second strip, you should
9	be considering when the stocking in the second strip
.0	A. In the second strip, yes.
.1	Qreaches stocking which could
. 2	A. Guarantee.
.3	Qencourage crown closure as soon as
. 4	possible?
.5	A. Right here, that's right.
.6	Q. And the stocking in the and are
.7	you then saying that you would determine that through
.8	an examination of what the stocking in the second coupe
.9	was?
20	In the second strip the only stocking
21	in the second strip that's going to be there before
22	it's cut is going to be advanced growth?
23	A. No. We said, previously we agreed
24	there is advancement of that growth, there is
25	additional growth, additional seeding in this second

coupe, sir. We discussed it for five minutes. 1 2 Before it's cut. Before it's cut or 0. after it's cut? 3 After it's cut. 4 Α. 5 0. And my question, sir -- my question 6 with respect is, I'm trying to find out when can you cut the second strip, not when will it regenerate, when 7 can you cut it? 8 If you cut the first strip in year one, 9 10 how many years do you have to wait before you can go 11 back and cut strip 2? 12 A. Sir, it may vary between two and 15 years. Between two and 15 years, depending... 13 Q. All right. All right. And what are 14 15 the criteria which you say should be looked at in order 16 to determine whether it is proper to cut the second 17 coupe at 2 or 15 years? The assurance of crown closure in the 18 19 earliest possible time to maintain source or to have 20 source nutrients in the mineral soil and so on, that is 21 the objective. 22 In other words, I have to have enough

In other words, I have to have enough

tree in that second cut, in that second clearcut, that

I have crown closure as soon as possible; in other

words, stocking, high stocking.

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1	Ç	. 80 per cent is your standard.
2	I	Oh, fine.
3	Ç	. All right.
4	Į	80 per cent standard.
5	Ç	As soon as possible?
6	I	A. As soon as possible. Unless certain
7	circumstances o	ther than timber management is involved.
8	If I am talking	protection of wildlife, if I am talking
9	about other use	er, then the forest manager have to
0	consider longer	period; in other words, until certain
1	height of those	e trees are achieved; in other words, the
.2	regeneration ac	chieved in order to serve as a habitat or
13	browse or whate	ever it is for the other users, other
14	users of the fo	orest.
15	Ç	Now, 80 per cent stocking as soon as
16	possible?	
1.7	l.	A. Right.
18		Q. Who decides what the time frame
19	1	A. Is?
20	(Qis?
21		A. The time frame is. That is
22	specification of	or prescription written in the management
23	plan and under	certain site-specific condition and so
24	on.	
25). By the forester based on his

1	understanding of si	ilvics?
2	A. 1	And of course development in stands
3	itself; in other wo	ords, dynamics, he observes it and
4	dynamics, yes.	
5	Q. I	All right. The forester does that,
6	that's why it's his	s job?
7	Α. (Oh, I think so that's his job.
8	Q. (Okay.
9	Α. 9	Surely.
10	Q. I	Now, if that is the criteria that you
11	believe should be	used.
12	A. I	Right.
13	Q	Then would you agree that that
14	situation of having	g enough advanced growth in the
15	A. 1	Not advanced, regeneration.
16	Q. 1	Enough all right, enough
17	regeneration in the	e second coupe before it is cut, all
18	right.	
19	Α. :	I don't know before it's cut.
20	Q	It's before that's what you're
21	saying.	
22	A. 1	No, I'm not saying, you
23	Q.	That you could
24	MS.	SWENARCHUK: Madam Chair, isn't it
25	worth clarifying wh	hether there is a fundamental

- misunderstanding going on here on that subject, and I
 think there is, and it would save us a lot of time if
 that issue could just be clarified.
- 4 MR. FREIDIN: Fine.
- q. Listen, if I'm not on the same wave
 length, I want you to tell me. I'm not trying to put
 words in your mouth, I am trying to understand when we
 cut that second coupe.
- 9 A. And I told you that already a few minutes ago.
- Q. All right. Is there a confusion here
 as Ms. Swenarchuk suggested, or are we understanding
 each other so far?
- A. Well, I suppose we will understand
 each other if we discuss this for next two days.
- Q. Well, let's hope not.
- 17 A. Oh, perhaps we should.
- 18 MS. SWENARCHUK: I think where the 19 misunderstanding comes in, Mr. Freidin, is whenever you 20 talk about regeneration established before the cut -21 which is I think what you just said - and I think that 22 you should clarify -- it might be helpful to clarify 23 with Mr. Marek whether he has intended to say or has 24 said that you determine the time of the second cut in 25 accordance with regeneration establishment in that cut.

i	MR. FREIDIN: All right. Let me ask that
2	question.
3	Q. Is the timing of the second cut
4	dependent in any way on the amount of regeneration
5	which
6	A. Is established.
7	Qis in by regeneration by
8	regeneration in the second cut no.
9	MADAM CHAIR: I think you're better off
LO	calling it the final coupe.
11	MR. FREIDIN: all right. I don't want to
12	use the word regeneration.
13	MR. MARTEL: No, use advanced growth
1.4	maybe.
15	MR. FREIDIN: Let me use advanced growth.
16	Q. When you've got a mature stand,
17	you've got the timber that you are going to harvest,
18	and you've got let's say black spruce, and you've
19	got black spruce which is small and you're not going to
20	harvest, perhaps you're going to leave it there as
21	advanced growth; is that right?
22	A. Well, of course you don't harvest
23	tree. Sir, why don't you read that article by Jeglum,
24	he describe exactly what the problem is. He describe
25	even the sizes of so-called advanced regeneration in

- 1 report you are using. Q. I know. He referred to things less 2 than 2.5 centimetres dbh. 3 4 Oh right down to -- regeneration from this size right down to... 5 Less that 2.5 centimetres dbh is what 6 7 he was counting. That's correct. Α. 8 9 Q. Now, is that what you refer to, you used the phrase renewal -- regeneration, I'm sorry. 10 Were you referring to that advanced growth as 11 12 regeneration? That's right, may be part of the 13 Α. 14 regeneration in this strips, the second coupe strips. 15 Q. All right. 16 Because you remove the canopy and 17 there is advanced growth there which sometimes survive, in case of balsam fir will not survive and, hence, what 18 19 I said before. So I don't know what the argument is. 20 Q. There's no argument. 21 Your statement doesn't describe Α. 22 anything either, because I am talking about very clear 23 procedure, how to regenerate the second strip, how it's
- Q. I want to get to the issue of how you

being done, how nature does it.

24

1 regenerate it. I'm trying to determine -- well, let me 2 just back right off here and let me try coming at it this way, Mr. Marek. 3 4 Yes, go ahead. 5 Let me give you a proposition and 6 tell me whether this reflects really what you're trying 7 to convey to me. A. Yes, go ahead. 8 9 0. That you should --10 A. Go ahead, sir, I am listening very 11 tentatively. I got to drink in meantime, but you go 12 ahead. 13 Q. That you should not be allowed to 14 harvest the second coupe until you feel that there is a 15 reasonable chance that you will get 80 per cent stocking in or after you cut that second -- the 16 remaining timber? 17 18 Correct, but it's not only advanced A. 19 growth, it's new regeneration which came in after you 20 cut it. 21 Q. All right. And where --22 That's component. A. 23 Oh yes, the new regeneration that Q. comes in after you cut, you said; is that what you 24

25

said?

A. I said there is advanced growth plus 1 the regeneration coming from neighbouring stand from 2 the isolated trees, it may flow from two miles away. 3 Right. And we agree, sir, that the 4 seed which comes in from the adjoining areas does not 5 6 come in from the adjacent -- the first coupe because 7 they are just wee little trees? 8 Which is regenerated maybe that high, 9 that high. That's right. 10 Q. 11 Α. Okay. Okay. If that is the case, then I 12 don't really think that we need the term and condition 13 14 2.1(a) to say that we can't -- look at the words, sir. 15 A. Yes. 16 Q. I want you to look at the words, 17 please, so we don't have to do this twice. Look at the 18 words in the first paragraph of 2.1(a) and in the last 19 sentence it is saying: 20 "Before we can do the second coupe..." 21 A. Yes. 22 Q. "...the adjacent cut-over areas...", 23 which you told me was the strip, "...must be producing viable seed." 24 25 If the adjacent strip does not contribute

- viable seed to reach this 80 per cent standard that you've suggested, I suggest that we take those words out of there and we put some words in there that reflect what you are saying; and, that is, that: Before the final cut occurs there must be a reasonable expectation or the expectation is a reasonable one that 80 per cent stocking will occur in the second coupe after you have cut it.
 - A. Sir, that is, that is something which put really, really stringency on forest management because on timber production and so on, because once you even second coupe; in others words, when you start reforest the area by multiple use system, multiple cutting system, you may or may not achieve exactly 80 per cent, you may achieve 69 per cent, you may achieve someplaces 85 per cent, in some cases hundred per cent.

Q. Yes.

A. And I think the reason here for using 80 per cent was mainly directed, mainly directed on the first coupe where we have to have a really high stocking to start the whole system back into production.

So, in other words, the first coupe regenerated 80 per cent plus, the second coupe may be regenerated 65 per cent, and here comes the manager if

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1	he if that 65 per cent represents early crown
2	closure, and as I pointed out on the picture there,
3	then indeed he may say: Sure, this is satisfactory
4	now, I have a good crown closure, that's the whole
5	ecosystem is working very well, let's remove the second
6	strip. And I didn't want to go into this because these
7	are fairly complex system and have to argue the point.
8	MR. FREIDIN: Could I just have one
9	moment, please.
. 0	MADAM CHAIR: Yes. Mr. Marek, given what
.1	you have just said then, unless you've had very dense
. 2	advanced growth that has grown very quickly after the
.3	first cut
4	THE WITNESS: And it survived, this is
.5	very important.
6	MADAM CHAIR: And it survived very
17	quickly, it's unlikely that you would have the final
18	coupe removed in two years?
19	THE WITNESS: No, we did it and we have
20	success. In some cases you may, on conditions and so
21	on.
22	MADAM CHAIR: Because of crown closure
23	associated with the advanced growth?
24	THE WITNESS: That's right.
25	MADAM CHAIR: Yes. Thank you.

1 .		MR. MARTEL: But in that last sentence it
2	says:	
3		"Before the final cut occurs on these
4		areas, the adjacent area", that's the
5	next where the	e first coupe was?
6		THE WITNESS: Right.
7		MR. MARTEL: "must be producing viable
8		seed."
9		I am not sure that is what you want to
.0	say, because	it's not going to produce any seed for 15
11	or 20 years ma	aybe.
12		THE WITNESS: That's right.
13		MR. MARTEL: Somewhere down the road, and
L 4	that sentence	seems to throw
L5		THE WITNESS: That's correct.
L6		MR. MARTEL: the rest of it out of
L7	whack, Mr. Man	rek. Can you see I think what the concern
L8	is, that we kn	now you have been arguing and putting
19	forth your pos	sition for some time that you will get it
20	in the second	coupe, you get it from advanced growth,
21	and you will	get it from seeds that are left deposited,
22	but the other	area where coupe one occurred, you're not
23	going to get	the seed there for a long time.
24		MADAM CHAIR: Well Mr. Marek has just
25	said you will	, if there's lots of advanced growth, you

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1	will be getting seeding from advanced growth?
2	THE WITNESS: No.
3	MR. FREIDIN: No.
4	MR. MARTEL: No.
5	MR. FREIDIN: No, he doesn't. Advanced
6	growth doesn't provide seed until it's 10 or 15 years
7	plus.
8	MR. MARTEL: We're just talking in the
9	area right next door, Mr. Marek. Are you going to get
10	seed from there how long before you get seed from
11	there?
L2	THE WITNESS: Well, the fact is by
L3	studying the situation of the so-called first coupe
L 4	regeneration which should supply seed to the last
1.5	coupe, okay, but in many cases you get seed in five,
16	six, seven years.
L7	We have cases where black spruce is
L8	capable, honestly trees are that high, and already
L9	produces cones, and here we haven't got really
20	documentation where we can say, you know, exactly
21	because the research didn't work on it.
22	But I think that is a good point what
23	where we should examine. The seed trapping is
24	extremely cumbersome, extremely long-term thing,
25	because I have done it in many instances, where does

the seed come from, because you put the trap say over

here - there is a seed trap like for cats and dogs or

something - there is a seed group too.

Lots of seed may come from here, lots of seed may come from tree which is growing here, you know, moves in, some seed may be coming from, as I said, miles away during the spring when you have crust on the snow, the cones open up and there they go.

So it's difficult to trap -- it's easy to trap it, but it's difficult to find the origin, where it comes from. And many foresters in many other areas did the trapping by not only establish the trap on the ground, they have towers, towers where they trap these seeds in order to find where that seed come from, and we know now in black spruce that indeed there are various component of the new regeneration coming from all over.

is to get that seed germinated here, in these last coupe, because you may have all kinds of — through logging and through disturbances, through the whole environmental changes even in these narrow strips which happen, frost for instance and so on.

You must be very careful to distinguish between seed coming in and seed which is germinating

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1	and eventually get established as future tree, and here
2	comes this paramount question that forester got to have
3	as early it's the crown closure, the component which
4	get the nutrients cycling by moisture, the branches,
5	and so he must watch and say: Okay, do I have enough
6	germinants, do I have also young trees which will then
7	benefit from these conditions.
8	MADAM CHAIR: Well, we understand your
9	position, Mr. Marek, but that's not what this condition
. 0	says.
1	THE WITNESS: Beg your pardon?
. 2	MADAM CHAIR: We understand your
.3	position, but it seems to be different than what is
. 4	written here with respect to the words 'adjacent
5	cut-over areas must be producing viable seed', as being
. 6	the only condition
.7	THE WITNESS: No, Madam, this tree,
8	that's the whole ecosystem, the whole biome is
9	supported, even that tree which is
20	MADAM CHAIR: So the whole surrounding
21	area as far as the eye can see and farther, we're not
22	talking about the adjacent
23	MR. MARTEL: You're not talking about the
24	cut before. I think Mr
25	MR. FREIDIN: When I asked him and I said

1	cut-over, he said: No, no, he says, I'm talking about
2	the strip.
3	MADAM CHAIR: You weren't talking about
4	the strip that was cut, the first cut, you weren't
5	talking about that?
6	THE WITNESS: But that is not the only
7	contributor. I am not trying to say, yes, the strip is
8	there to supply
9	MR. MARTEL: But that's where the
10	misunderstanding is between you and Mr. Freidin. I
11	think Mr. Freidin takes the position that you said in a
12	question he raised, and I'm not going to try and put
13	words in your mouth, but I'm just trying to straighten
14	out where I see the difference, we are getting closer
15	to what the actual difference is - and that is, does
16	this really mean (a) just the area that you cut two
17	years ago, and you're saying, no, it's everything, it's
18	edge from
19	THE WITNESS: Certainly.
20	MR. MARTEL: It's a whole series of
21	factors?
22	THE WITNESS: But please, I like to point
23	out that the words which Mr. Freidin was using before
24	lunch, he says what the hell - didn't you say that -
25	you clearcut it and you will depend on advanced

1	regeneration, and then of course the conversation
2	started: Oh, is there what, is there advanced
3	regeneration which may contribute to the stocking of
4	the second or third strip.
5	And that is a fine point which I like to
6	distinguish.
7	MR. MARTEL: I think what he said, and I
8	wrote it down, was if you strip cut and you have some
9	advanced growth and it's going to be helpful, then why
10	couldn't you do the whole area at once, relying on the
11	advanced growth to regenerate the area.
12	I think that is what upset you.
13	THE WITNESS: Something like that. Oh,
14	didn't upset me because I expect this, because so
15	simple, but it is not as simple as Mr. Freidin is
16	telling us.
17	MADAM CHAIR: That's fine. I think we
18	can leave this point, Mr. Marek, and Ms. Swenarchuk has
19	taken note of the wording of this condition. The Board
20	doesn't think it reflects Mr. Marek's evidence, and we
21	will leave it with you.
22	MR. FREIDIN: Thank you, Madam Chair.
23	Q. Then, Mr. Marek, if you go back to
24	two matters, still dealing with these strip cuts, your
25	strip cuts which have received so much attention from

1 Mr. Jeglum and others. I think you indicated that -- we had a 2 3 discussion about the width of strips? 4 Α. That's correct, up to 80. 5 0. Up to 80. 6 That's right. 7 You indicated that the 1982 report, I 0. think you suggested wasn't current and that --8 9 No, I didn't say -- I said hopefully I disagree on these wide strips. I said that, sir. 10 11 Q. And I think you suggested that Mr. 12 Jeglum had somehow changed his view on that and now 13 he's in agreement with you that you should have narrower strips? 14 15 After seeing results, yes, he's 16 changed. I am in contact with him steadily on this, 17 yes. 18 Q. All right. Can you turn please to tab -- pardon me, the Jeglum 1989 article. 19 20 What? Is that in the --Α. 21 That is in your source book. Q. 22 Source book, which number 2. Jeglum Α. 23 here, yes. I think this is Jeglum. Alternate Strip Clearcutting to Regenerate Black Spruce, Why Aren't We 24 25 Using It More?

1	Q. That's the one, sir.
2	MADAM CHAIR: Is that 1 or 2?
3	MS. SWENARCHUK: Two, Madam Chair.
4	MADAM CHAIR: Thank you.
5	THE WITNESS: Here.
6	MADAM CHAIR: Thank you, Mr. Marek.
7	MR. FREIDIN: Q. And I think you agreed
8	with Ms. Cronk during her questioning that this is the
9	most recent document, publication in relation to
10	A. That is correct.
11	Qthese strip cuts?
12	A. Yes.
13	MADAM CHAIR: What page are you on, Mr.
14	Freidin?
15	MR. FREIDIN: All right.
16	Q. Would you turn please to page 9, and
17	we are dealing with this suggestion that Dr. Jeglum has
18	somehow changed his mind about the 80.
19	A. No, no, I didn't say that. I didn't
20	say that about that 80. We are talking about other
21	strip cutting in other areas of which we are studying.
22	No, please. He said something in 1981 or
23	'79, that stands for him. What I'm saying, that Mr.
24	Jeglum now after doing more research and making
25	observation that we are talking about narrower strips

1	and so on.	
2		Q. All right. Let me refer you to page
3	9 at the botto	om, it says this.
4		A. Yes.
5		Q. This is the most recent article by
6	Jeglum, 1989:	
7		"The standard operational strip in the
8		shallow soiled upland sites in the Domtar
9		operation is 60 metres."
10		A. Yes.
11		Q. "However, if the site is very rocky
12		and rugged, then site preparation will
13		expose a high proportion of bedrock"
14		A. Yes.
15		Q. "which should be reduced to, say,
16		40 metres to increase the amount of
17		shelter provided by the adjacent leave
18		strips."
19		A. Yes.
20	·	Q. "If the site is predominantly wet
21		with lots of sphagnum, the width could be
22		increased to 80 or 100 metres. It is
23		possible to make leave strips narrower in
24		order to obtain a higher proportion of
25		inexpensive natural regeneration"

ı	A. Yes.
2	Q. "in the first cuts", et cetera
3	A. See that's already, that's already
4	modify some of the statement before.
5	Q. So he is saying that there are
6	various widths that one might want to go to, up to a
7	hundred metres depending on the circumstances, and I
8	suggest that that, therefore, indicates that you were
9	incorrect when you suggested that he somehow was
1.0	advocating narrower strips and, more particularly, I
11	would suggest that it is contrary to the intent of
12	FFT's term and condition 2.1(a) which indicates, as we
13	have already reviewed, that strip cut widths shall not
14	exceed two times the height, which you indicated was
15	approximately 160 feet?
1.6	A. Sir Madam Chair, Mr. Freidin said
17	incorrect. Was I incorrect in what, stating in the FF
18	statement that I agree with certain widths, or what?
19	Q. No, suggesting that Dr. Jeglum has
20	reciled somehow from his original position of strips o
21	80 metres and the like, and is now advocating, based o
22	his conversations with you, narrower strips?
23	A. Well, he already changed his opinion
24	to 40 metres from the previous one, from 80 metres

where we were talking about and now he's talking about

25

1 40 metres.

2 Well, let me point out, sir, that when we dealing about special prescription and when we dealing 3 4 especially in this case varying the widths from 40 to 5 80 and from 80 say to 20 metres, so I think we 6 should -- we are not playing any games, there are sites there are sites where forester, due to circumstances, 7 due to the unexpected problem, the difficulty with 8 9 logging, should go in wider strip and I don't think 10 this manual or the FFT statement contradicts it, 11 flexibility.

- Q. All right. Let's put it this way.
- 13 A. Yeah.

12

- Q. Regardless of what the words in that

 2.1(a) say, they should be clearer or clearly reflect

 that the widths can vary, that they can vary at least

 up to 100 metres depending on site conditions according

 to Jeglum. Would you agree with that?
- 19 A. No.
- Q. Why not?
- A. Because I just don't believe that.

 Sir, before I have suggested that strip width should be no more than two heights. I have examined the whole spectrum of not only regeneration but also moisture condition, moisture condition, condition of the

1	terrain, and so I give a very careful attention to it.
2	And may I assure you if I would have
3	found, I personally have found, not Dr. Jeglum, if I
4	would have thought that I would have been justified to
5	expand the width of the strip to two miles and it was
6	beneficial to the renewal of the forest, I would have
7	glady done it, but I couldn't.
8	Q. So you and Dr. Jeglum just disagree
9	then on this issue?
10	A. Oh yeah.
11	Q. No, you do?
1.2	A. Yes, we do.
13	Q. All right. Another issue you gave
14	evidence some days ago that the narrower the strip the
1.5	less the blowdown. Did I get it down correctly; is
L6	that your evidence?
1.7	A. Sir, we are again dealing with yes or
18	no, because there are gray areas between. Yes, I have
19	said that narrower strip are preferable if the total
20	layout of strip is qualitatively sound, and if it's not
21	of course then I have very little choice.
22	Q. In terms of blowdown.
23	A. In term of blowdown, because blowdown
24	will be severe and will increase blowdown.

Q. The narrower -- but to avoid

25

1	blowdown, do you go narrower or do you go wider?
2	A. If the layout is done properly
3	Q. Yes?
4	Athe narrow strips have many
5	advantages to the wide strip, including blowdown.
6	Q. All right. I am just concerned about
7	the advantages of blowdown.
8	A. Yes, I know.
9	Q. Is it your evidence that if the
10	layout is properly done, narrow strips are better in
11	terms of reducing blowdown than wider strips?
12	A. Correct.
13	Q. Would you please turn to
14	A. I know Sheffield and Weetman. Madam,
15	we are repeating the same thing again, we are going to
16	go for ever and ever. We have discussed that report by
17	Crossfield and I have mentioned very clearly why we
18	entertain, or why I feel that narrow strips are
19	preferable, including blowdown, if the layout is done
20	properly.
21	In case of research which was done by
22	Fleming and Crossfield the layout was not properly
23	done, it was not my layout, therefore, we had all kind
24	of incremental damage to blowdown.
25	Q. Who did the layout?

Oh, case of Crossfield I think it was 1 A. done Domtar. 2 You had no input? 3 0. Very little. Because you see, sir, 4 one important thing in a modified cutting is not only 5 6 layout but the direction of the roads, direction of the 7 roads. We have already talked about this, 8 we've talked about the orientation and the buffering 9 10 and you indicated that they made the wrong observation; right, you already told me that? 11 12 Who did wrong observations? I referred you to your source book in 13 relation to the Crossfield article, which I assume is 14 15 in -- looking at Crossfield, Volume No. 2, would you 16 turn to that. 17 A. Yeah, I know it by heart, believe me. 18 MS. SWENARCHUK: Volume 1. 19 MR. FREIDIN: Q. Volume 1, I'm sorry. 20 A. And classify who made the 21 observation. 22 Q. All right. I will give you a chance 23 to deal with that, I just want to make sure the Board 24 is following this. 25 A. Yeah.

1		Q. Turning to page 21, just dealing with
2	this you're	e asking me this observation.
3		I referred you this morning to page 21 or
4	the first full	l paragraph on the right-hand side of the
5	page where Flo	eming and Crossfield concluded that:
6		"Neither buffering of the open ends of
7		the strip by adjacent timber or strip
8		orientation has a consistent effect on
9		volume losses."
10		And you told me that they were wrong,
11	that that was	the wrong observation?
.2		A. No. Exactly. So we discuss it
13	already.	
1.4		Q. All right. That's not the part I
15	want to go to	now.
16		A. Okay.
17		Q. Now, we're talking about the issue of
L8	the width and	effect on blowdown. I have your evidence
19	on that.	
20		A. Yes.
21		Q. And I suggest to you, Mr. Marek, that
22	in these strip	cuts on page 21 the conclusions which
23	have been made	e by the authors are, and we look at page
24	21 the right-	nand side of the page, going up five, six
) E	or somen line	down from the top and it says:

1	"Strips should be as large as
2	regeneration requirements, topography and
3	soil and stand conditions permit."
4	We are talking about blowdown here.
5	"Therefore, 80-metre wide as opposed to
6	narrower alternate strip cuts are
7	recommended as long as they provide for
8	sufficient regeneration and adequate site
9	protection on the shallow soiled upland.
10	If the size of the first cut strips is to
11	be increased in relation to the leave
12	strips to ensure better regeneration, the
13	tradeoffs of additional volume loss
14	through greater windfall and mortality
15	resulting from narrower leave strips
16	versus improved natural regeneration must
17	be considered."
18	All I'm trying to do, Mr. Marek, is to
19	put the record straight; that you've got to make a
20	tradeoff and that these authors say that the wider the
21	strip the better it is in terms of alleviating
22	blowdown, not what you have suggested in your evidence
23	and, that is, that it should be narrower to avoid
24	blowdown?
25	A. No, I don't accept it. The lines

1	have very much to do with it which is not even
2	mentioned, partially. Actually, you can look through
3	the example, you know, but I have my own opinion, I
4	testify to my observation, sir, regardless what Mr.
5	Fleming and Crossfield said.
6	Q. Are you saying, sir, that that
7	conclusion is wrong because the buffering and the
8	orientation was wrong?
9	A. No, strips were too short, strips
10	were too short, sir, because pleasing Domtar for layout
11	for wood extraction certain distances of skidding and
12	so on.
13	Q. How long were the strips?
14	A. Oh, they were no more than 200 to 300
15	feet. They should be at least half a mile long.
16	Q. By the way, how long is is there
17	an average size strip in terms of length that you
18	recommend?
19	A. A length? Yes, as long as possible.
20	Q. As long as possible.
21	A. As terrain allows and the skidding
22	distance allows and so on.
23	Q. What's the longest strip you have
24	ever seen?
25	A. Oh, I think I have seen a thousand

feet, depend on the terrain. 1 2 A thousand feet? Yeah, approximate. I didn't measure 3 them, let's put it this way. 4 Q. No, no, that's fine, that's fine. 5 And if we took your strip width of 160 feet, I just 6 want this -- we would end up with 160,000 square feet 7 8 in a strip? 9 A. Could be. 10 What's that in acres? Is it an acre? Q. Sir, you are calculating. You do it 11 A. 12 all. 13 I will do the calculation. 0. 14 Please do so. Please do so. A. 15 Thank you. Okay. Let's move down to 16 the second paragraph, 2.1(a) where we are talking about 17 black spruce stands. 18 A. You talk 2.1(a) again. 19 This is the FFT 0. 20 FFT, okay. Okay, okay, fine. A. 21 2.1(a), yeah, black spruce working group. 22 Q. Actually, I'm sorry, but before we do 23 that, have you got the 1982 Jeglum report? 24 Jeglum, yes.

Q.

1585.

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25

1 Α. Yes, yes, yes. 2 0. Just before we leave that. 3 Α. Yeah, '82. Okay, what page? 4 Q. Page 12, the table we were looking 5 at. 6 A. That's right. 7 Now, the results -- am I correct, Q. sir, that the results which are the stocking results 8 which are indicated in the years '76, '78, '79 and 9 · 80--10 11 A. That's right. 12 Q. -- are in the first coupe? 13 A. Does it say -- where does it identify -- the effects have been... This is a pre-cut 14 15 assessment. 16 Q. All right. '74. Yes, that will be from '74 to 17 Α. 18 '80, so I'm not quite sure where it actually belong 19 here. Q. All right. I'm sorry, I'm starting 20 21 to lose the paper war now. 22 MADAM CHAIR: Is this a good time for the 23 afternoon break, Mr. Freidin? 24 MR. FREIDIN: Wonderful. I just found

25

it.

1	THE WITNESS: Recess?
2	MR. MARTEL: Recess. Let's move out.
3	Recess taken at 2:45 p.m.
4	On resuming at 3:05 p.m.
5	MADAM CHAIR: Thank you.
6	MR. FREIDIN: Q. On the 1982 Jeglum
7	report, the Exhibit 1585, I just wanted to direct your
8	attention, Mr. Marek, to page 18.
9	A. Yes.
10	Q. Where we have the discussion, and you
11	notice on the right-hand side of the page, first
12	paragraph, it says:
13	"This experiment did not address the
14	problem of how to regenerate leave
15	strips."
16	A. No.
17	Q. Okay.
18	A. But I'm still failing what page
19	are you on?
20	Q. Page 18.
21	A. I have 18, yes.
22	Q. On the right-hand side of the page,
23	first full paragraph, "This experiment"
24	A. I must have it.
25	Q. You may have the wrong one, it's the

1	1982
2	A. Oh.
3	MS.SWENARCHUK: Mr. Marek, it's the copy
4	that MNR provided.
5	THE WITNESS: Oh, that's again that '82
6	thing.
7	MR. FREIDIN: Q. Let's just do it this
8	way, Mr. Marek. Let's see if we can hurry this up.
9	Here we go. Here's 18, it says:
10	"This experiment did not address the
11	problem of how to regenerate leave
12	strips."
13	A. Okay, okay, okay.
1.4	Q. So therefore, can we conclude, sir,
15	that the stocking results which we find at page 12 are
16	in fact stocking results which were done on the first
17	coupe?
18	A. From the advanced growth in the
19	standing timber, yes.
20	Q. And from whatever seed came from the
21	leave strips?
22	A. Yeah, that's right.
23	Q. Okay, thank you. And that indicates
24	that after four years, if we look at page 12, the
25	stocking to black spruce in the first coupe was 65 per

1 cent? 65 per cent, that's right. A. 2 0. Thank you very much. 3 4 A. Yeah. Now, you made a comment this morning, 5 Mr. Marek, that if we looked at the Jeglum results it 6 would indicate that the strip cuts or the trees in the 7 8 strip cuts grew much better than in the clearcut. Do 9 you remember telling me that? 10 That's documented. I don't know if it's the same report, but I think it is, but -- no, the 11 12 other one. 13 Q. It's the 1984 report? '84, that's right. 14 Α. 15 Let's just go to the 1984 report to 16 examine that proposition. That's Exhibit 1586. 17 MS. SWENARCHUK: What's the proposition 18 again, Mr. Freidin, please? 19 MR. FREIDIN: The proposition is that the 20 strip cuts grew much better than the clearcuts --21 regeneration in the strip cuts grew much better than in 22 the clearcuts. 23 Q. All right. Do you have that report? 24 MADAM CHAIR: That was 1586, Mr. Freidin? 25 MR. FREIDIN: Yes, 1586.

1	MADAM CHAIR: All right, thank you.
2	THE WITNESS: Okay. What page, Mr.
3	Freidin?
4	MR. FREIDIN: Q. Okay. Would you turn
5	to Table No. 4 on page 10.
6	A. Yes.
7	Q. By the way, this was the article
8	where they were actually doing a test, as the title
9	says, of results, planting versus seeding.
10	A. Yes.
11	Q. And they made those comparisons in
12	lowlands and uplands and on clearcuts
13	A. And strip cuts.
14	Qversus strip cuts.
15	A. Correct.
16	Q. That's what it says right in the
17	title?
18	A. That's correct.
19	Q. So Table No. 4 then deals with
20	uplands; is that right? Table 4, total height per
21	centimetre for planted stock and seed spots in uplands?
22	A. Yes.
23	Q. All right. And clearcuts and strip
24	cuts as well in those uplands.
25	A. Yeah.

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A. Yes. Q. Planting paper pots, applying bare seed. A. Bareroot stock. Q. Bareroot. The third one is applying bare seed? A. Bare seed, okay. Q. And the fourth— A. Shelter seed. Q. —-treatment is shelter seed? A. Yes. Q. And they then compared what sort of total height increment they got in clearcuts and strip cuts in relation to each of those treatments? A. That's right.	1	Q. And what they do is, they show the
A. Yes. Q. There are four different treatments, planting bareroot, being the first one on the left-hand column. A. Yes. Q. Planting paper pots, applying bare seed. A. Bareroot stock. Q. Bareroot. The third one is applying bare seed? A. Bare seed, okay. Q. And the fourth— A. Shelter seed. Q. —-treatment is shelter seed? A. Yes. Q. And they then compared what sort of total height increment they got in clearcuts and strip cuts in relation to each of those treatments? A. That's right. Q. And what they did, if we go to Table 5.	2	results or report the results for total height
Q. There are four different treatments, planting bareroot, being the first one on the left-hand column. A. Yes. Q. Planting paper pots, applying bare seed. A. Bareroot stock. Q. Bareroot. The third one is applying bare seed? A. Bare seed, okay. Q. And the fourth— A. Shelter seed. Q. —-treatment is shelter seed? A. Yes. Q. And they then compared what sort of total height increment they got in clearcuts and strip cuts in relation to each of those treatments? A. That's right. Q. And what they did, if we go to Table 5.	3	increment in the situations indicated?
planting bareroot, being the first one on the left-hand column. A. Yes. Q. Planting paper pots, applying bare seed. A. Bareroot stock. Q. Bareroot. The third one is applying bare seed? A. Bare seed, okay. Q. And the fourth— A. Shelter seed. Q. —-treatment is shelter seed? A. Yes. Q. And they then compared what sort of total height increment they got in clearcuts and strip cuts in relation to each of those treatments? A. That's right. Q. And what they did, if we go to Table 5.	4	A. Yes.
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9 Q. Planting paper pots, applying bare 10 seed. 11 A. Bareroot stock. 12 Q. Bareroot. The third one is applying 13 bare seed? 14 A. Bare seed, okay. 15 Q. And the fourth— 16 A. Shelter seed. 17 Q. —-treatment is shelter seed? 18 A. Yes. 19 Q. And they then compared what sort of 20 total height increment they got in clearcuts and strip 21 cuts in relation to each of those treatments? 22 A. That's right. 23 Q. And what they did, if we go to Table 24 5.	7	column.
10 seed. 11 A. Bareroot stock. 12 Q. Bareroot. The third one is applying 13 bare seed? 14 A. Bare seed, okay. 15 Q. And the fourth— 16 A. Shelter seed. 17 Q. —-treatment is shelter seed? 18 A. Yes. 19 Q. And they then compared what sort of 20 total height increment they got in clearcuts and strip 21 cuts in relation to each of those treatments? 22 A. That's right. 23 Q. And what they did, if we go to Table 24 5.	8	A. Yes.
A. Bareroot stock. Q. Bareroot. The third one is applying bare seed? A. Bare seed, okay. Q. And the fourth— A. Shelter seed. Q. —-treatment is shelter seed? A. Yes. Q. And they then compared what sort of total height increment they got in clearcuts and strip cuts in relation to each of those treatments? A. That's right. Q. And what they did, if we go to Table 5.	9	Q. Planting paper pots, applying bare
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13 bare seed? 14 A. Bare seed, okay. 15 Q. And the fourth— 16 A. Shelter seed. 17 Q. —treatment is shelter seed? 18 A. Yes. 19 Q. And they then compared what sort of 20 total height increment they got in clearcuts and strip 21 cuts in relation to each of those treatments? 22 A. That's right. 23 Q. And what they did, if we go to Table 24 5.	11	A. Bareroot stock.
A. Bare seed, okay. Q. And the fourth— A. Shelter seed. Q. ——treatment is shelter seed? A. Yes. Q. And they then compared what sort of total height increment they got in clearcuts and strip cuts in relation to each of those treatments? A. That's right. Q. And what they did, if we go to Table 4. 5.	12	Q. Bareroot. The third one is applying
Q. And the fourth— A. Shelter seed. Qtreatment is shelter seed? A. Yes. Q. And they then compared what sort of total height increment they got in clearcuts and strip cuts in relation to each of those treatments? A. That's right. Q. And what they did, if we go to Table 4. 5.	13	bare seed?
A. Shelter seed. Qtreatment is shelter seed? A. Yes. Q. And they then compared what sort of total height increment they got in clearcuts and strip cuts in relation to each of those treatments? A. That's right. Q. And what they did, if we go to Table 5.	14	A. Bare seed, okay.
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A. That's right. Q. And what they did, if we go to Table 5.	20	total height increment they got in clearcuts and strip
Q. And what they did, if we go to Table 5.	21	
24 5.		cuts in relation to each of those treatments?
	22	
A. Yes.		
	23	A. That's right. Q. And what they did, if we go to Table

1	Q. They were looking in this case again
2	in the uplands. Do you see that in the second line of
3	the title, Table 5, and this time they were looking at
4	current annual height increment?
5	A. Increment.
6	Q. And again, going down the left
7	column, they did it for the four different regeneration
8	treatments and again compared results, clearcut versus
9	strip cuts?
LO	A. Yes.
Ll	Q. On Table No. 6 on the next page they
1.2	went to the lowlands or they're reporting results on
13	lowlands, we see that in the first line?
1.4	A. Yes, yes, yes.
1.5	Q. And they are looking at total height
16	increment. They did the same thing on the lowlands for
17	total height increment as they did on the uplands?
18	A. Yes.
19	Q. And if we turn to page 13 and Table
20	No. 7, they did the current annual increment
21	measurements on the lowlands in the same fashion as
22	they did for the uplands?
23	A. Correct, correct.
24	Q. Okay. So really what we've got here
25	then, if we look at all the tables, there are 32

combinations of site and regeneration treatments? 1 Yes. Α. 2 0. Correct? 3 4 Α. Yes. Now, if we look at these tables --5 and while you're on page No. 7. 6 7 A. Yes. Pardon me, I'm sorry, Table No. 7 on 8 Q. 9 page 13. 10 A. Yes. There is a third column in this 11 Q. table, and in all of the other ones which we will go 12 through in a minute, but the third column is 13 significance of what they call the T-test. 14 And my understanding, sir, is that is 15 just an indication of whether the difference between 16 17 the results reported to the left of that column; i.e., 18 the results in the clearcuts and the strip cuts were statistically significant or not. 19 20 Yes. Α. Is that right? 21 Q. 22 A. Yes. 23 And would you agree with me that in 24 the case of the current annual height increment on 25 lowlands, there was -- the differences, if any, were

1	not of statistical significance; that's what it
2	reports, NS all the way down the line?
3	A. Yes.
4	Q. Turn back a page to Table 6. Under
5	the eight situations we have seven differences, if any,
6	or differences which were not statistically
7	significant, but we have one, the results on the dark
8	peat using paper pots?
9	A. Mm-hmm.
10	Q. Has a little star there in the
11	right-hand column, and that indicates that the
12	difference was statistically significant at the 5 per
13	cent level, and we see that by looking at the little
14	legend at the bottom of the table?
15	A. Yes.
16	Q. And in that particular case the
17	result was better in the clearcut, and that was the
18	difference which was statistically significant?
19	A. Level, yes.
20	Q. Right. 62 was the total height
21	increment in the clearcut and 46 in the strip cuts, and
22	that was statistically significant?
23	A. Yeah.
24	Q. Go back to Table 5 and here of the

eight reported situations, six the differences are not

25

- statistically significant, 1 of them I just want you
 to confirm that I'm reading these right one of them,
 the T-test was not applied because, as indicated at the
 bottom of the table in the footnote, only one replicate
 contained living trees?
- A. Correct.
- Q. And we have one situation where there
 was statistical significance, and in this case the
 strip cut got a better result in terms of current
 annual height increment; is that correct?
- 11 And -- yes? Yes, you agree with that?
- A. Well, it's written there, yes.
- Q. All right. And we go back to Table 4

 and we can read the table again here, and out of the

 eight there were seven that could be reported in terms

 of results, in only two of them was there statistical

 significance, and in both of those cases the strip cut

 is reported to have done better than the clearcut;

 okay?
- A. What has that to do --

21

22

23

24

25

Q. What that suggests to me, Mr. Marek, is that out of 32 combinations of site and regeneration treatments only four had differences which were significant at the 5 per cent level, one of those had better results in clearcuts, and three of them had

1	better results in strip cuts.
2	And I would suggest to you that that does
3	not support your proposition that you made this morning
4	that the regeneration in strip cuts, and to use your
5	words, grew much better than in the clearcuts?
6	A. Sir, read the recommendation of the
7	author what he states. Never mind
8	Q. And I'm looking at the results. Do
9	the results support the proposition that you made?
.0	A. May I Madam Chair, may I quote:
.1	"Uplands: For both the clearcut and
2	strip cut"
13	MR. MARTEL: What page are you on?
4	THE WITNESS: On page 9, same report.
5	MR. FREIDIN: Q. You are going to the
16	words at the right-hand side of the table, sir?
17	A. No, left-hand side.
18	"Total and incremental height growth.
19	For both the clearcut and strip cut the
20	planted trees were taller in 1982 than
21	the trees originating from either
22	bareroot or shelter seed spots."
23	And so it goes:
24	"Comparison, two cutting methods show
25	that planted and seeded trees on the

1	strip cut, mineral soil seedbed were
2	generally taller and faster growing than
3	those of clearcut area."
4	We are talking about statistic, man,
5	which I don't think has no significance at all to the
6	findings of the author who state in plain English that
7	trees were taller.
8	Q. Let's worry about whether it is
9	significant, the issue of statistical significance is
10	significant or not. I suggest to you and I was
11	quite aware of the passage on page 9.
12	A. Yes.
13	Q. The authors reported a difference,
14	that's all they have done on page 9. I suggest to you,
15	sir, that if one wants to determine whether the
16	difference which was reported is of any significance,
17	one normally will look and see whether there is any
18	statistical significance to the difference, and these
19	authors clearly indicate or the results clearly
20	indicate
21	A. That's better.
22	Qthat the statistical
23	significance there was only a statistical
24	significant difference in four out of 32 cases, one
25	which favored clearcuts, three which favored strip cuts

and that does not support your evidence that the strip cuts grew much better than the clearcuts, if one is worried about in any significant way.

A. Does this -- Madam Chair, does this support the author's statement which we just quoted here where the author, or Jeglum here in this case, states that No. 1, 2, 3, that trees he found taller in the individual treatment.

I'm sorry to say, this is -- why he wrote that report, why did he write these statements in the first place, he should have said statistically unsound, statistically it show that maybe, maybe not the trees are growing--

Q. Well, he didn't --

A. --in many instances, but he states very clearly - let me finish, please, because this is of significance of word plain, very plain these words, sir - why didn't Jeglum said what you are saying?

Q. Because, sir, he referred to Tables 4 and 5 and a person who is experienced in reading these reports would go to the tables, read the tables, go through the tables, find out that in four of 32 cases there was a difference that was statistically significant and the conclusion one would come to, based on that, is that the report does not support a

proposition, a general bald statement that strip cuts 1 grew much better than clearcuts in terms of 2 3 regeneration. That's what'm am suggesting to you, and 4 if you don't agree with me, that's fine, just tell me 5 6 so. 7 A. I don't agree with you. 8 Q. Thank you. We'll just move on. Okay. Thank you. 9 - A. Q. Mr. Marek, term and condition 2.1(a), 10 11 this is the Exhibit 14 --12 Again. A. 13 FFT. Q. 14 FFT, yeah. Okay. Silvicultural A. 15 prescriptions, right, draft terms and conditions? Yes, sir. 16 0. 17 Α. Yes. 18 Page 2. Do you have that? Q. 19 Yes, I have it. A. 20 The bottom one where you're talking Q. 21 about -- I'm sorry, paragraph 3. 22 A. Yes. 23 Q. Where it has been amended, and in 24 this case we're talking about black spruce stands with 25 some mixture of black pine or larch.

1	A. Yes.
2	Q. And you're talking about a
3	three-coupe system and with the amendment now reads in
4	1416A:
5	"The last strip shall be harvested only
6	if the adjacent strips have been
7	satisfactorily regenerated to a standard
8	not less than 80 per cent stocking"
9	A. Yes.
. 0	Q. "to black spruce." Is that right?
.1	A. Yes, yes.
.2	Q. There was a change there from the
.3	viable seed situation to this 80 per cent stocking?
. 4	A. That was misunderstanding due to
.5	typing and
.6	Q. Okay. My question for you is,
.7	when just one moment. There has been evidence led
.8	about how stocking standards are done, sort of
.9	five-year stocking assessments are done.
20	A. Assessments, yeah.
21	Q. Are you talking about this 80 per
22	cent stocking being measured based on that same
2.3	procedure?
	A. Well, based I'm not arguing about
25	should be one years, two years, five years. This is

1	again matter of gray discussion right now, when we
2	should appraise or make conclusion on certain stock and
3	density.
4	Q. I'm just wondering, is the method the
5	same?
6	A. The method the same as compared to
7	what?
8	Q. All right. The reason I ask you
9	this, Mr. Marek, is if you go to one of your stands
10	where you've got 200,000 little fellows and you were
11	doing your stocking assessment there.
12	A. Yes.
13	Q. You would probably have a hundred per
1.4	cent stocking every time.
1.5	A. Correct.
16	Q. If in fact you got that across the
1.7	whole site?
18	A. That's correct. That's correct.
19	Q. What I want to know is, when should
20	this stocking be done, this stocking assessment be
21	done?
22	A. That's what I understood.
23	Q. And which method of stocking do we
24	use, do we use the stocking method which is set out for

instance in the 1981 Regeneration Survey Manual of

25

Ontario, or what do we do?

A. Oh, you are asking me now precise

prescription which I would do it.

- Q. I want to know how somebody -- if somebody has imposed upon them the obligation to do this, I want to make sure that they know if there is some information they should have as to when they should do it and which method?
- A. Oh, sir, this is a subject which we being hotly discussed between provinces, between foresters, between individual organizations and every one of them has a different opinion about stocking and density not density, but stocking standards which may differ from Alberta to Nova Scotia. There is many methods do it.
- Q. Would you be willing to leave it up to the Ministry of Natural Resources to determine when and how that stocking assessment should be done?
 - A. The timing of assessment?
- Q. Yes.
 - A. The timing of assessment should be done done -- I suppose first assessment should be done probably immediately after the area was regenerated or at least the project started to renew, and then I think the next one should be where the competition starts

1	moving in, and then I suppose farther assessment should
2	be done when the problem of competition is resolved or,
3	if it's not resolved.
4	And then the final assessment of dynamics
5	of stands should be documented. That's very broadly,
6	very broadly what I want to tell you.
7	MR. MARTEL: What was that last point,
8	Mr. Marek?
9	THE WITNESS: The assessment should be
. 0	done then later on.
.1	MS. CRONK: Should be documented, Mr.
. 2	Martel.
.3	THE WITNESS: Or should be documented.
.4	Okay, would you repeat that?
. 5	MS. SWENARCHUK: When the problem of
. 6	competition has been resolved or not.
.7	THE WITNESS: When the problem of
.8	competition has been resolved or not resolved. In other
.9	words, if we have really free to grow or if we don't
20	have a free to grow, and quote "free to grow".
21	MR. FREIDIN: Q. But in terms of making
22	the assessment as to whether you got 80 per cent
23	stocking so that you could go ahead and cut your third
24	coupe, your third strip, when would you do that?
25	A. When the forester or forest manager

- realize that he has stand growing which would tend to achieve crown closure and; in other words, the primary species established on the site is identified as firmly established and going to be a stand which we expect or which we desire.
- Q. Okay, thank you. And a question going back to some of the earlier questions we talked about having to attempt natural regeneration before you and then if you fail, you go in and you artificially use artificial methods to supplement. Do you remember that, we had a long discussion about that, Mr. Marek.
- A. Yes, yes.

- Q. I would like to know how long do you

 wait to see whether you have failed before you can go

 in and use an artificial regeneration method?
 - A. Sir, that's a very individual, very specific decision where forester must go, investigate and see: Ah, here is such and such condition, then he immediately goes in and take the action. That is very, very valuable and I cannot tell you or pinpoint exactly when.
 - Q. So you have got to rely on the forester to make the determination as to when it has failed?

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1	A. We discuss it, Madam, in my testimony
2	what the role of foresters are in this circumstance.
3	Q. Thank you very much. Thank you very
4	much. I'm trying to move along here, Mr. Marek.
5	If you go to the second paragraph in
6	2.1(a) and in this case we're talking about black
7	spruce stands or classified as unstable, fragile and
8	sensitive with exposed bedrock, generally designated as
9	protection forest reserves.
10	On those areas, you indicate that the
11	width should not exceed one and one half times the tree
12	height?
13	A. Yes.
14	Q. Now, we have a definition of
15	sensitive in term and condition 2.3(b), if you turn
16	over the page.
17	A. Of the FFT report?
18	Q. Yes, go to page 4.
19	A. Yes.
20	Q. You define sensitive sites, page 4.
21	A. Roman (iv)?
22	Q. No, no, I'm still talking about the
23	Forests for Tomorrow?
24	A. Oh, I see.
25	Q. I'm sorry. In the Forests for

1 Tomorrow, page 4, you define sensitive sites, areas you 2 say which are sensitive to the impacts of harvesting. 3 A. I don't define them, sir. 4 Q. All right. You describe situations 5 where -- well, all right, what do you do there? 6 MS. SWENARCHUK: What paragraph are you looking at? 7 8 MR. FREIDIN: I'm looking at paragraph 9 2.3(b). 10 THE WITNESS: 2.3(b). Yeah, "For each 11 forest management unit..." 12 MR. FREIDIN: Q. I guess maybe you don't 13 define them. You told us that there's a difficulty even trying to do that. 14 15 A. "For each forest management unit the 16 MNR shall identify...", and is that what 17 you're talking about? Q. Right. You indicated that when 18 19 you're talking about sensitive you really have to be talking about sensitive -- you have to answer the 20 question, sensitive to what, sensitive in the air -- is 21 22 that right? 23 A. Madam -- sir, we discussed this several times what fragile --24 MADAM CHAIR: Yes, Mr. Marek, we have 25

your evidence that you would rather call them unstable 1 2 sites--Unstable. 3 THE WITNESS: MADAM CHAIR: -- to encompass a wide range 4 of possible conditions. 5 THE WITNESS: Right. And there is also 6 document I think in the supplement which qualify 7 actually some of the parameters of the so-called 8 fragile sites or --9 10 MR. FREIDIN: Q. Can I put it to you this way: When you talk about unstable, fragile and 11 sensitive sites in 2.1 -- in the second paragraph of 12 13 2.1(a). 14 2.1(a). A. 15 0. You're talking about -- 2.1(a), the 16 second paragraph. 17 A. 2.1(a), yeah. 18 When you're talking about unstable, 19 fragile and sensitive sites, can I assume that what 20 you're talking about are the sites referred to on page 21 4 which you describe as being sensitive to the impacts 22 of harvesting by reason of nutritional status, slope, 23 soil depth, soil type and texture or drainage? 24 Α. Some of the parameters, yes.

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All right.

Q.

25

1	A. Those are some of these parameters.
2	Q. Are any of the other parameters
3	defined or stated anywhere in the terms and conditions?
4	A. I think we are talking about
5	biological stability and, sir
6	Q. This is biological or this is
7	forest stability and that sort of thing that Van
8	Miegroet talks about when you talk about forest
9	stability?
10	A. That's right.
11	Q. All right. Well, we'll deal with
12	that - not now. All right. So that's helpful. You
13	indicate in the second paragraph on page 2 under
14	2.1(a)
15	A. Yes.
16	Q. You make reference to the FEC guides,
17	improved versions. Are those the ones that have been
18	marked as exhibits, or are those the ones which you
19	believe will exist if in fact they are improved, as you
20	have suggested?
21	A. I didn't what are you talking
22	about, sir? Madam
23	Q. All right. And I know it's late.
24	See the second paragraph on page 2 under the heading
25	black spruce working group?

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_	
2	Q. It says it makes reference in the
3	third line to the FEC guides, but then it's got, comma,
4	'improved versions'. What does improved versions mean?
5	A. Oh. Improved versions we talk about
6	improved version of the ecosystem you talk about
7	ecosystem, FEC.
8	Q. That's what it says here.
9	A. That's right.
LO	Q. And I want to know what improved
11	versions means?
L2	A. Just we are clear what we are talking
13	about.
L 4	Q. Yes.
15	A. I dealt with it, Madam.
1.6	MADAM CHAIR: Yes. And Mr. Freidin is
1.7	asking, if your proposals were implemented, that would
18	be the improved version, it's not just the latest
L9	publication?
20	THE WITNESS: No, no, no. This has not
21	been done.
22	MADAM CHAIR: It has not been done.
23	MR. FREIDIN: Q. That's all I want to
24	know and I think we have your evidence on I may
25	discuss it later, but I have your evidence on that.

1 Thank you very much. 2 Α. You are welcome. 3 You make reference in that paragraph 4 about - if I can get it in context - on black spruces sites classified as unstable, fragile and sensitive 5 6 with exposed bedrock generally designated as protection 7 forest reserve. Would you agree with me, sir, that all protection forest reserve--8 9 A. And production --10 --or production forest? 11 No, no, they are two different 12 concepts, sir. There is difference between. 13 Did I say production? 0. 14 Well, I don't know which one you 15 said, but I just want to pay attention to one thing, that we have two concepts here, production and 16 17 protection forest. Q. All right. And you're talking here 18 about protection forest reserve? 19 20 I talking about both of them. 21 I know, but -- well, are you saying Q. 22 that they're synonymous, the same? A. No, they are not, but I am dealing 23 with both as defined by government, by the ground rules 24

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and also by some of the new inventories.

25

But the words here talk about 1 protection forest reserves. Doesn't use the word 2 production forest reserves, only uses the one. 3 4 Α. It does not, it does not. And so this term and condition is 5 0. only talking about areas designated as protection 6 7 forest reserves? In the inventory as we have now or in 8 A . 9 the past, that's a PFR mean protection forest reserve. 10 Q. All right. Which encompasses probably both in 11 12 that new version and I am confusing again, Madam, but 13 the fact is --Q. No, I know this is a bit of a 14 15 confusing area. 16 Yes, very much so. Α. 17 Q. I think it's your -- is it your evidence that protection forest reserves in the old 18 inventory had a different meaning --19 20 No, no, that has a specific 21 classification. 22 No, no, no, no, just let me finish my question. Do I understand your evidence that 23 24 protection forest reserve in the old inventory has a 25 different meaning than production forest reserve in the

1 present inventory? 2 A. Yeah, the parameters are somewhat different. 3 Q. All right. And when you're talking 4 5 here about protection forest reserves, you're talking about as it was defined in the old inventory? 6 7 Α. Right. 8 Q. Thank you. 9 A. PFR. 10 Now, could you tell me, are all areas which would qualify -- you talk about here sites which 11 12 would generally be designated as protection forest reserves. I take it from that, sir, that just because 13 an area would be classified or qualified to be 14 15 classified as protection forest reserves--16 A. Yes. --according to the old definition--17 Q. Definition, yeah. 18 -- does not mean necessarily that it 19 Q. will be an unstable, fragile or sensitive site? 20 A. Would you repeat it again, please, 21 22 what you just said? Q. Would you agree that all protection 23 24 forest reserves --25 Α. Yes.

1	Q. All of them are not unstable, fragile
2	or sensitive, some of them are
3	A. In protection forest reserve, the old
4	PFR
5	Q. Yes?
6	Aencompasses certain sites which may
7	or may not qualify in these two terms used presently in
8	the classification of production forest reserves and
9	Q. I'm just talking about the old. If
L 0	you can just get your mind around the old definition.
11	A. Yes.
12	Q. Am I correct or am I incorrect that
13	there are areas in the old inventory which would have
. 4	been protection forest reserve but which would not be
1.5	unstable, fragile or sensitive?
16	A. Oh, I think most of these from my
L7	experience, most of these area qualify that they are
18	unstable.
19	Q. Thank you.
20	A. And, therefore, go under the category
21	of protection forest in the old inventory.
22	Q. All right. Most of them, but not all
23	of them?
24	A. Sir
25	Q. All right, I've got your evidence.

1	A. There are exceptions to everything.
2	Q. And in terms of production forest
3	reserve well, let's not worry about that, we have
4	your you don't use that word there.
5	Okay. In the third paragraph when you
6	talk about:
7	"In all black spruce stands with some
8	mixture of jack pine or larch", can
9	you give me any ballpark figure as to what you're
. 0	talking about in terms of the percentage of jack pine
1	or larch that must be in the black spruce stand before
2	this third paragraph
.3	A. Well, obviously the jack pine is in
4	the minority and it may vary from .1 maybe to .2 or
.5	even in some cases .3, but in general it's a minority
6	the representation in the black spruce working group,
.7	or the black spruce stand.
8	Q. So if I understand you correctly, if
19	you've got a 10 per cent component or more in the black
20	spruce stand
21	A. Yes.
22	Qof jack pine, then the third
23	paragraph is the method that in fact must be used?
24	A. Yes, yes. I can see where you are
	•

25 talking, yes.

1	Q. Is that right?
2	A. Yeah.
3	Q. Thank you.
4	A. I consider it's a black spruce stand
5	more or less, it's got
6	Q. In tha situation that I gave you, it
7	would be a black spruce working group?
8	A. That's right.
9	Q. Okay. Would you turn the page,
10	please, to page 3.
11	A. Same guidelines.
1.2	Q. Same, FFT. This is the one where we
13	talk about in the second line, we're talking here about
14	mixed woods, and you indicate in the second line that:
15	"Balsam fir growth shall be harvested and
16	advance growth eliminated by specific
1.7	site preparation."
18	A. That's correct.
19	Q. And are you suggesting that that be
20	done even if there's no market for the balsam fir?
21	A. That is correct.
22	Q. Where would you suggest that the wood
23	be put if it's harvested but there's no market for it?
24	A. If it's useless wood it's got to be
25	disposed someplace, and that is usually by mounting it

1 or forwarding in the piles. It has to be destroyed because it's dangerous component of the system. 2 Q. Okay. So it would be put on these 3 4 piles, these windrows? Can be burned off too. I mean, that 5 stuff burns very easily under certain conditions too. 6 7 It could be burned, that has been done quite 8 frequently. 9 Q. You have got -- if you go down the 10 page on page 3 and it's got aspen -- just the last --11 just above (d), it says: 12 "Aspen shall be utilized and not left to 13 seed trees." 14 Do you see that? "Aspen shall be utilized and not left 15 as seed trees." That is correct. 16 17 Q. I'm going to ask you the same question. What if there's no market for the poplar 18 that you have to cut down, where do you put it? 19 20 Should be removed from the site and if it cannot be removed, should be left cut down on the 21 22 ground. Q. All right. Scattered across the site 23 or in windrows or does it matter? 24

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A. Well, I don't think -- it's

immaterial. If you pile it up you are, of course, 1 eliminating that area from the production because it 2 create awful mess, if you try just cut it and leave it 3 4 on the ground, that way you are going to simplify these things and you are going to make the total area 5 accessible for silvicultural treatment. 6 7 Q. All right. How do you treat the suckers that come in after you harvest aspen? 8 9 A. Oh, now we are what I was waiting 10 for. And we're talking here about mixed 11 Q. 12 wood stands? 13 No, no, it goes to the previous A. question done by the counsel for the Industry which 14 15 present me with a kind of thing I didn't understand 16 what she was talking about, Madam Chair, it's the 17 bulldozing of poplar, remember? 18 MADAM CHAIR: Yes, Mr. Marek. 19 THE WITNESS: Okay. Let's go to that 20 because after she give it to me I give it some thought, 21 and while at first didn't comply with the answer because all of a sudden I didn't know what she was 22 23 talking about, now elimination -- it's well-known, 24 Madam Chair, that the ingrowth of poplar can be very 25 aggressive; one tree can produce thousands of suckers

L	and	one	tree	can	produce	ten	thousands	of	seeds.
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What Madam Cronk was talking about was that here -- bulldozing of the root system, bulldozing by scraping the top layer off the site to remove the parts of the root systems left from the poplar tree, goes -- that's a root system which poplar usually have.

Now, what Eddy does - and I thought of it later on, that obviously what he's talking about too - eliminate the suckering, we bulldoze this off, scrape this area, and by doing so remove many of these opportunity of these suckers to germinate or to set the bud - they don't germinate - set the bud, thus, leaving area fairly free of these parts of the root system which produce the suckers.

Now, what they do, of course, they bulldoze it and there is pile of bulldozed material, there is a pile of bulldozed material, and this is fairly clear for planting.

Now, this method has been used for centuries matter of fact and there are very good documentation on this problem. One problem with this kind of approach is that by removing certain layers of the topsoil, thus bulldozing off or removing these suckers, you cannot totally remove them because the suckers are not like black spruce root system, suckers,

1.	or their	root s	system	go n	nuch o	deepe	er; in ot	her wo	ords	3,
2	they are	still	left	over	from	the	residual	tree	in	the
3	arounds									

So immediately of course, No. 1, is that all not suckering can be removed due to the remnants of some of these root systems; and, No. 2, is - which is much more dangerous - that by any scraping of mineral soil and the organic material - which as you probably heard from me on many occasion is a part of very important component of site as far as productivity is concerned - we are removing very valuable nutrient capital from the site, piling it up on these piles beside the corridors established. So while you may eliminate some suckering you don't eliminate all of it.

And there is very interesting research done in Alberta right now with poplar, with poplar which states this, that these suckers, in many instances, can take over the site regardless of their numbers. In other words, when you leave a thousand remnant root system with the suckering potential, it doesn't make any difference how many you leave. If you leave only few, trembling aspen is capable to ingress the total area and revert into poplar.

This is just coming out of Alberta Forest Service, several experiments done, and which leads me

- to believe that there are two points to consider; No.

 1, you may remove some suckering opportunity, you don't

 remove it totally; No. 2, by doing this you are
 - removing the most valuable part of the components of the topsoil.
 - 6 MR. FREIDIN: Okay, Mr. Marek.
- MS. CRONK: Excuse me, Mr. Freidin, I

 apologize. Madam Chair, may I address the Board on

 this matter?
- 10 MADAM CHAIR: Yes, Ms. Cronk.

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11 MS. CRONK: Madam Chair, you will recall 12 that towards the very end of my cross-examination on 13 Monday I put a series of questions to Mr. Marek about this issue. After I had completed that 14 cross-examination I came back after lunch, Mr. Marek 15 indicated there was something additional he wished to 16 say about the matter, having had a chance to consider 17 18 it further, and the indication from the Board, which 19 was entirely acceptable, was that he do so in re-examination. 20

The difficulty the evidence just given now presents me is that I did not have a chance to cross-examine Mr. Marek on matters particular to a practice which the Board has heard relates to Eddy, and I would like the right to follow up on very brief

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1	questions to Mr. Marek about this matter at the
2	appropriate time.
3	MADAM CHAIR: The appropriate time being
4	before Mr. Marek is finished on Monday?
5	MS. CRONK: Yes. And at the end of the
6	day, so that I don't interrupt further my friend, if I
7	could address the Board about that timing aspect, yes.
8	MADAM CHAIR: I think, Ms. Cronk, that we
9	have no objection to you asking further questions and
.0	we would ask that it be kept very short, 10 minutes or
.1	shorter, that you follow immediately after Mr. Freidin
.2	and before Ms. Seaborn.
.3	MS. CRONK: Well, if I could then take a
4	further moment of the Board's time and address the
.5	matter now.
.6	You will recall that there is another
.7	issue as well relating to a report that we heard about
.8	for the first time yesterday, the Domtar report, that
.9	Mr. Marek is to produce.
20	MADAM CHAIR: Yes.
21	MS. CRONK: And I had indicated that I
22	wanted an opportunity, obviously, to get instructions
23	about that and become informed about it and ask some
24	questions about it, if that's appropriate - it may not

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be at all, I don't know, I haven't seen the document,

I'm not aware of it - and I can absolutely assure the
Board that whatever questions I do ask with respect to
those matters will be quite brief indeed.

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Having said that I did not anticipate the progress of matters this week quite the way they have turned out and I'm obliged to inform the Board that I have a scheduled appearance in Federal Court of Appeal on Monday and Tuesday of next week, it's going to be -that cannot be reassigned to another partner involved and, in the circumstances, my suggestion was going to be this, that if the Board would permit me to do it, either Mr. Cosman will be present to ask the questions about which I speak or, alternatively, if my friend Mr. Freidin is prepared stand down for 15 or 20 minutes first thing on Monday morning at nine o'clock or ten o'clock - I forget when the Board was going to reconvene on Monday - at 10:00, to address that matter and be complete. That assumes, of course, that I've seen the Domtar report.

I would obviously prefer not to put Mr.

Cosman in a position of having to do so when he wasn't here for the evidence, but I'm in the Board's hands and I recognize it's difficult, given my schedule, but I can't do anything about it.

MADAM CHAIR: Well, I think the Board

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1 will accommodate, Ms. Cronk. The problem on Monday is that Mr. Martel has no control over Air Canada and 2 we've learned the last month that that plane can arrive 3 at any time. 4 MS. CRONK: Well, I'm on the list for 5 Monday afternoon, Madam Chair, in court. 6 MADAM CHAIR: All right. 7 8 MS. CRONK: With the argument in the matter under appeal to commence either Monday afternoon 9 10 or Tuesday. 11 I quite agree that any questions I may 12 have must precede Ms. Swenarchuk, and all I'm 13 suggesting is that if there's no severe objection to 14 it, that that be done before Mr. Freidin completes in 15 order that I might do it. 16 MADAM CHAIR: Right. 17 Ms. Swenarchuk? 18 MS. SWENARCHUK: Just really for the 19 convenience of, Ms. Cronk, with regard to the Domtar 20 report, I understand that it's in Beardmore. 21 THE WITNESS: I have it home, yes. 22 MS. SWENARCHUK: Yes. And so Mr. Marek 23 will be bringing it back and it will be available 24 Monday. I don't know that it will be available before. 25 MADAM CHAIR: What time does Mr. Marek

1 come -- do you come in Monday morning, Mr. Marek? 2 THE WITNESS: I'm coming here Saturday, 3 Madam. 4 MS. SWENARCHUK: Saturday when? 5 THE WITNESS: Saturday afternoon. 6 MADAM CHAIR: We'll leave it with you, 7 Ms. Cronk, and Ms. Swenarchuk to sort out. 8 MS. CRONK: We'll sort that out and I'll 9 a copy over the weekend. MADAM CHAIR: Thank you very much. 10 11 MS. CRONK: Thank you, I appreciate it. 12 MR. FREIDIN: Madam Chair, notwithstanding my amusement of the phrase that we 13 lawyers use about standing down, I will sit down and 14 15 allow Madam Cronk --16 MS. CRONK: Some of us do stand, but I'm 17 grateful for either. MR. FREIDIN: Yes, right. I have no 18 19 objection to her interrupting what flow there may be to 20 my cross-examination. MADAM CHAIR: Thank you, Mr. Freidin. 21 22 MR. FREIDIN: Q. Okay. Now, in this section of the terms and conditions dealing with mixed 23 24 wood management including white spruce, you indicate on 25 page 3 that:

1	"Harvesting shall be by block cutting in
2	various sizes depending on topography and
3	sites."
4	A. That's what page, sir?
5	Q. On page 3
6	A. 3.
7	Qin the fourth and fifth lines,
8	"Harvesting"
9	A. "Harvesting shall be block", yes,
10	I got it. Okay.
11	Q. Can you tell me, sir, is balsam fir a
12	prolific seeder?
13	A. Very, very much so.
14	Q. Is there any return time you don't
15	specify any return time in terms of when you can come
16	back and cut the leave blocks. Was that your
17	intention?
18	A. Yes, very much so. I wouldn't dare
19	to prescribe here in more detail in mixed wood
20	management, because mixed wood management is a if
21	you're talking about black spruce management, the mixed
22	wood management is much more, I would say, complex
23	because you are dealing with very productive sites
24	usually, not always, not always mixed wood is. But in
25	general, mixed wood are, as indicator species, present

- they are usually more productive than the other sites.
- Q. Could you tell me what the rationale
 then is for the suggestion that the harvesting shall be
 done by block cutting?

A. Sir, I think there are two aspects of it. No. 1 is the ecological aspect of the land; in other words, proliferation of ingress of species which are usually occupying these sites and some restriction should be done in order to prvent poplar being seeded all over the countryside.

The second one is that in mixed wood management quite frequently site preparation occurs or actually should occur which may be quite drastic - and this is probably happening in mixed wood management, this corridor, it's probably mixed wood management.

The third one is the visual impact of large area clearcut on upland which usually can be seen far away; in other words, upland — usually on upland, in other words, the higher elevated areas, then you can see them quite visibly; in swamps or in flat areas you don't see the effects of large clearcuts.

But when you compare this to the upland, yes, there is a certain vision, I think certain aesthetics involved and I feel that we should be probably restrict the large area cutting there to

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1	smaller small blocks. So that's the reason, sir.
2	Q. Okay. If I can deal with the first
3	two reasons which have implications in terms of
4	regeneration.
5	A. Right.
6	Q. You made mention, the first one was
7	ingress of species occupying the site?
8	A. Yes.
9	Q. You want to avoid that to prevent
.0	poplar being seeded all over the countryside?
11	A. That's right.
12	Q. If poplar, as you have indicated, is
13	a prolific seeder and balsam fir, as you have said, is
4	a prolific seeder
15	A. Yes.
16	Q and you cut this in blocks and,
1.7	therefore, what you're doing is leaving standing balsam
18	fir and trembling aspen and standing balsam fir, are
19	you not going to get seeding in of your block cut from
20	those undesirable species?
21	A. Sir, balsam has a heavy did you
22	ever see balsam seed? You probably didn't. Okay.
23	May I instruct you on looking at it,
24	because balsam seed is very large, usually drop
25	directly from the cones which open periodically every

- year, and seed goes usually straight down. So there is not a great danger of balsam reseeding over the balance because just shear size and weight of the seed.
 - Q. All right. That is balsam fir. Now, what about poplar where I think you indicated before that it seeds and it blows for miles and miles?
 - A. See -- okay. Sir, here again we are talking about what size. If you going to clearcut area 10 square miles and let the seeding done over 10 square miles, or if you leave that seeding done or ingress of poplar in, say, hundred acres or 200 acres, surely, surely there are certain implications, and...
- Q. I'm sorry, I didn't catch your last...
 - A. There is certainly implications in size of the cut, indeed. If you have a large clearcut the balsam fir will not fly all over the country or cause the ingress of the spies, whereabout poplar will, because poplar seed is very tiny and, as you know, the fuzz which is eventually spraying over the countryside has this effect on seeding.
- Q. Okay. And just one last question in relation to your answer.

25 A. Yes.

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1		Q. You said the second reason was in
2	mixed wood man	nagement site preparation occurs which may
3	be quite dras	cic. Is that the sort of site prep that
4	would provide	seedbeds which would be equally receptive
5	to any poplar	or balsam fir which might blow in?
6		A. See, this is a problem.
7		Q. All right. But that is all I want to
8	know, that is	something which could occur?
9		A. Yes.
. 0		Q. Okay, thank you.
.1		A. Yes.
.2		Q. In the same paragraph you state in
.3	the last line	before we get to jack pine working group
4	so we are tall	king about mixed wood still here,
.5	including whi	te spruce mixed wood stands which
.6	include white	spruce, it says:
1.7		"The planting of spruces white and black
8		may be prescribed if economically
9		feasible."
20		We had a discussion about
21		A. Yes, we had.
22		Qeconomically feasible and present
23	net worth back	c on page 2?
24		A. Yeah.
25		Q. I'm assuming that that is the method

1 by which one would determine economic feasibility, 2 that's all I want to know. 3 Α. Well --4 0. Same way that you did on page 2? 5 Α. Yes. 6 Thank you. Why haven't you provided 7 for the opportunity to plant jack pine on these mixed 8 wood sites when jack pine does in fact occur in mixed wood stands? 9 10 In intensively managed area, here we A. 11 go again, goals and objectives. 12 Well, does this section in relation 13 to mixed wood management only relate to intensive 14 areas? 15 Sir, when you consider every one of A. 16 these pararaphs, every one of these sections, please 17 keep in mind that this will be extremely affected by 18 the goals and objectives for the certain area. 19 0. Yes. Now, I didn't do it here or the FFT 20 didn't specifically go in details in this, where and 21 what. We are talking in very broad generalities and I 22 certainly feel strongly that if some guidelines will be 23

on, and more details supplied, and this is a very

adapted that these guidelines will be perfected, worked

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general guideline. 1 2 Q. Do I take it, sir -- am I to take that answer as being an indication that these terms and 3 conditions should not be looked upon -- or, pardon me, 4 do not encompass or delineate all of the things -- I 5 don't know how to put this question. It's almost four 6 7 o'clock. 8 MR. MARTEL: You left some out. MR. FREIDIN: I'll put a star a beside it 9 and figure out how to deal with it. Well, I don't 10 think I'll ask that one. 11 12 Q. But do you as a professional 13 forester, Mr. Marek, have any objection to the planting 14 of jack pine in a mixed wood site? As a professional 15 forester do you have any objection--16 A. In intensive management, yes. 17 Q. No, do you have any objection to the 18 planting of jack pine in a mixed wood stand, 19 particularly where jack pine formed part of the mixed 20 wood stand to start? 21 As a site conversion to jack pine, 22 yes; in intensive management, yes. 23 Q. You say it's okay in intensive 24 management?

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Yes, yes.

A.

L	Q.	All	right.

- A. Matter of fact that will be and is being done and will be done probably. Yes.
- Q. But in this case you have indicated
 before that where natural regeneration -- well, in
 these mixed wood stands, can you plant we're not
 talking about black spruce now can you plant are -well, first of all, do you have to try natural
 regeneration first?
- A. Well, jack pine that's --
- Q. No, no, just -- my question is: In
 the mixed wood stands --

A. Sir, you are talking about the broad spectrum and try to get some foothold on where, when and how because it's so important in forestry because I know very well if I going to say yes, you going to take it as a gospel, and I am not preparing any gospels here, what I'm trying to tell you that there are broad outline and in many circumstances in these thousands of forests Baskerville talking about we going to have -- no.

So, yes, there is an option in many instances that we will do jack pine management in mixed wood where jack pine was before and perform very well, perform very well; in other words, it's going to be a

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1	good site which can support jack pine.
2	Yes, I don't have objection, but that has
3	got to be qualified by the broad goals and objectives
4	entrenched in that management planning process and
5	timber management plan itself; in other words okay.
6	Q. I'm not sure I have a clear enough
7	answer for my purposes. Can I take it from your answer
8	then that you can indeed plant jack pine, I'm sorry, in
9	an area which previously was mixed wood?
10	A. Mixed wood poplar, like for instance
11	on Eddy, he's got lots of mixed wood stands, poplar and
12	jack pine to certain proportions.
13	Q. Can you go on those areas and plant?
14	A. That's why they do this, it's all
15	jack pine.
16	Q. Can you go on those areas and plant
17	jack pine?
18	A. Well, that's what they do right
19	there, they plant jack pine in these corridors.
20	Q. According to these terms and
21	conditions, is that permitted in those stands?
22	A. In intensive management?
23	Q. In intensive management it's
24	permitted; in multi-purpose yes?
25	A. As a prescription in timber

1	management plan.
2	Q. Yes.
3	A. Approved by and so on.
4	Q. The answer is yes, in intensive
5	management areas as set out in the timber management
6	plan.
7	A. Yes.
8	Q. Is it permitted, according to these
9	terms and conditions, in multi-purpose forests?
.0	A. No, no.
1	Q. Do I take it then that the planting
.2	of spruces white and black - wait a minute, let me
.3	finish - that the planting of spruces black and white
.4	then is only permitted in a mixed wood stand or after a
.5	mixed wood stand has been harvested only in areas where
.6	they have been identified as single-purpose timber
.7	management; i.e., intensive forestry in the timber
.8	management plan?
9	A. That's maximization of forest, yes.
20	Q. Okay.
1	A. Madam Chair, can you visualize this
2	kind of treatment, successive spray, chemical tending
23	and so on area in multi-purpose forestry.
4	I like to appraise the situation, what
25	that mean multi-purpose forestry, where you eliminate

1	poplar completely, plant jack pine over and tend two
2	and three times, or maybe once, I don't know.
3	That is not my view, sir and Madam, for
4	multi-purpose forestry, or design of multi-purpose
5	forestry, because you would have a conflict right from
6	the beginning: What are you going to do with moose,
7	what are you going to do with other things, and here we
8	go again.
9	MADAM CHAIR: Time up, Mr. Freidin?
0	MR. FREIDIN: I think it's time to break,
11	Madam Chair.
12	MADAM CHAIR: Thank you. We will see you
13	Monday morning and Monday might be your last day with
4	us, Mr. Marek.
15	THE WITNESS: What a pity.
16	MADAM CHAIR: And again, we will try to
17	begin at 10:30 on Monday. We just don't know. Let's
18	aim for 10:30 and see what happens. The plane just
19	hasn't been arriving for a ten o'clock start.
20	Thank you.
21	Whereupon the hearing adjourned at 4:00 p.m., to be
22	reconvened on Monday, November 26th, 1990, commencing at 10:30 a.m.
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